IN THE CIRCUIT COURT OF KANAWHA COUNTY
STATE OF WEST VIRGINIA

JAMES E. McCUNE, et al.

Plaintiffs,

vs

THE AMERICAN TOBACCO COMPANY, et al.,

Defendants.

VOLUME I

CIVIL ACTION
NO. 97-C-204

The video deposition of ELBERT D. GLOVER, Ph.D., taken upon oral examination, pursuant to notice and pursuant to the West Virginia Rules of Civil Procedure, before Johnny J. Jackson, Registered Diplomate Reporter and Notary Public in and for the State of West Virginia, Wednesday, September 22, 1999, at the Offices of Jones, Day, Reavis & Pogue, 31st Floor, Conference Room D., 500 Grant Street, Pittsburgh, Pennsylvania.

JOHNNY JACKSON & ASSOCIATES, INC.
606 Virginia Street, East
Charleston, WV 25301

(304) 346-8340

APPEARANCES

On behalf of PlaintiffS:

GOLDBERG, PERSKEY, JENNINGS, WHITE & HOSTLER, P.C.
Ted Goldberg, Esquire
1030 Fifth Avenue, Third Floor
Pittsburgh, PA 15219
(412) 471-3980

On behalf of Lorillard Tobacco Company:

THOMPSON, COBURN, LLP
Carl L. Rowley, Esquire
Richard Cassetta, Esquire
One Mercantile Center
St. Louis, MO 63101
(314) 552-6000

FARRELL, FARRELL & FARRELL, L.C.
Christy Smith, Esquire
914 Fifth Avenue, Suite 300
Huntington, WV 25772
(304) 522-9100

On behalf of R. J. Reynolds Tobacco Company:

JONES, DAY, REAVIS & POGUE
John Goetz, Esquire
Brian C. Costello, Esquire
500 Grant Street
Pittsburgh, PA 15219
(412) 391-3939

On behalf of Philip Morris Companies, Inc. and Philip Morris, Inc.:

Ronni E. Fuchs, Esquire
DECHERT PRICE & RHOADS
4000 Bell Atlantic Tower
1717 Arch Street
Philadelphia, PA 19103-2793
(215) 994-2963

On behalf of United States Tobacco Company:

SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP
Douglas E. Fleming, III, Esquire
919 Third Avenue
New York, New York 10022-3897
(212) 735-3000

On behalf of Liggett Group, Inc., Liggett & Myers, Inc., and the Brooke Group, LTD:

PULLIN, KNOPF, FOWLER & FLANAGAN
Ben Hughes, Esquire
Kenneth E. Knopf, Esquire
1000 Bank One Center
707 Virginia Street, East
Charleston, WV 25301
(304) 344-0100

INDEX

ELBERT D. GLOVER, Ph.D. - DEPONENT

SEPTEMBER 22, 1999

EXAMINATION BY:

EXHIBITS IDENTIFIED:

VIDEOGRAPHER: We are now on the record.

At this time would all counsel present please state their appearance for the record.

MR. ROWLEY: Carl Rowley for Lorillard Tobacco Company.

MR. CASSETTA: Richard Cassetta, Lorillard Tobacco Company.

MS. FUCHS: Ronni Fuchs, Phillip Morris, Incorporated.

MR. FLEMING: Doug Fleming, United States Tobacco Company.

MS. SMITH: Christy Smith, Lorillard Tobacco Company.

MR. KNOPF: Ken Knopf and Ben Hughes on behalf of Brooke Group and Liggett Meyers.

MR. GOETZ: John Goetz on behalf of R.J. Reynolds.

VIDEO OPERATOR: Would the Court Reporter please swear the witness.

MR. GOLDBERG: Ted Goldberg for the Plaintiffs.

ELBERT D. GLOVER, Ph.D., DEPONENT, SWORN

EXAMINATION

BY MR. ROWLEY:

Q. Good morning, Doctor.

A. Good morning.

Q. Please state your full name, please.

A. Elbert D. Glover.

Q. Doctor Glover, you have had your deposition taken before?

A. Yes.

Q. If I ask you any questions that are at all unclear to you, I would appreciate it if you would let me know that the question is unclear instead of answering. Is that fair?

A. Yes.

Q. If you answer a question that I ask, we will assume that you understood it. Is that fair?

A. Yes.

Q. Doctor, what is your current employer?

A. West Virginia University School of Medicine.

Q. How long have you been employed there?

A. Since May of 1990.

Q. What is your position at the West Virginia School of Medicine?

A. Professor in Behavioral Medicine and Psychiatry. I'm a professor of Family Medicine. And I'm director of the Tobacco Research Center at

the Mary Babb Randolph Cancer Center.
Q. How did you end up at the West Virginia of School of Medicine?
A. I was actually teaching at Penn State. They have a tobacco research center there. I was basically consulting and speaking in West Virginia, and they approached me about the possibility of a position.
Q. What exactly is the Tobacco Research Center?
A. Tobacco Research Center is just, is within the Mary Babb Randolph Cancer Center. And what we do is we typically conduct tobacco research, primarily focusing on treatment. We test pharmacological adjuncts, basically, to help people quit smoking.
Q. Does that involve assessing cessation methods?
A. Yes.

Q. Was there a Tobacco Research Center at the time that you joined the West Virginia School of Medicine?
A. No. There was not.
Q. Did you initiate it?
A. Yes.
Q. Have you been the director since its inception?
A. Correct.
Q. Give me some more detail on the types of activities that the Tobacco Research Center engages in.
A. We have tested pharmacological adjuncts to help people quit smoking, like the gum, the patch and the nasal spray, oral inhaler, Bupropion SR.
Everything that is currently available in the U.S. to help people quit smoking we have tested or worked with at one time or another.
And we have a program that's been developed called Start Smart, basically, that's being used, adopted by hospitals and Blue Cross/Blue Shield and several people. It is a program that has counseling in combination with

either NRT or the new Bupropion to help people quit smoking.
And in the process we always collect data and information, some basic kinds of numbers in terms of research. But we are primarily involved right now with testing the pharmacological adjuncts ... various products.
Q. Is your teaching position at the university a self-funded position?
A. Self-funded meaning?
Q. Meaning does grant money that you obtain have anything to do with your compensation at the University?
A. No.
Q. Do you from time to time procure and receive grant money?
A. Yes.
Q. Is some of that grant money used for

the testing of pharmacological adjuncts that you have described?
A. Correct.
Q. Is the majority of the grant money used for that purpose?
A. Yes.

10

Q. From whom do you receive grant money of that kind?
MR. GOLDBERG: I would object if that is confidential. If it is not confidential I don't object.
A. I could tell you previous ones that are known, but someone like GlaxoWelcome or SmithKline Beechum, pharmaceutical companies, Sando others, a variety of companies, Pharmacia & Upjohn. There's quite a few that are testing and looking at products that we have, in fact, tested.
Q. What entity receives the money from these pharmaceutical companies for this testing?
A. The West Virginia Tobacco Research Corporation receives all the money.
Q. What is the West Virginia Tobacco Research Corporation?
A. It's basically a group or corporation that's been set up to administrator grants. And any grant that comes into the University, so that it doesn't mix, I believe, with State money, it is allocated and run through the West Virginia Research Corporation.
Q. Who is it who procures these grants?

11

Do you have involvement in that?
MR. GOLDBERG: Objection, two questions. Which question?
Q. Do you have involvement in the procurement of these grants?
A. In other words, actually getting them?
Q. Yes. Do you solicit them?
A. Sometimes. Sometimes, I would say, probably four out of five really they come to us as opposed to us going to them.
Q. What percentage of the funding of the Tobacco Research Center comes from grants from various pharmaceutical companies?
A. Probably pretty close to a hundred percent.
Q. Do you get credit for grant monies that you procure?
A. From the University?
Q. Yes.
A. No. Not ...
Q. Does it further your professional objectives to get grant money in any way?
A. No. Not that I -- I am probably about as high as I could possibly go within ranks of the

12

University. So I don't really, it doesn't really help.
Q. Was there a time when it furthered your professional objectives to get grant money to procure it?
A. Yes. You probably have to go back 15,

18 years ago, somewhere in there.
Q. What was the first instance of grant money that you procured for the Tobacco Research Center from a pharmaceutical company?
A. Which, I guess because I had a tobacco research center at Penn State as well. So I guess you are talking to the one in West Virginia in particular?
Q. Let's talk about for the benefit of any institution, what was the first occasion that you were able to procure money, research money from a pharmaceutical company?
MR. GOLDBERG: For tobacco research?
MR. ROWLEY: Yes, sir.
A. I would have to, I would have to go back and look at my resumé to be really honest.
Q. Sure. Give me a rough estimate.
A. Maybe twelve years ago, something like

that, thirteen years ago. And I'm just guessing. Maybe a little longer.
Q. Who was that from, which pharmaceutical company?
A. Lakeside Pharmaceuticals.
Q. I'm sorry.
A. Lakeside Pharmaceuticals. They were working -- well, no, that is not correct. I'm trying to think. It was right in there. I'm trying to recall. Marion, Merrill Dowell. I believe at the time they were called Merrill Dowell. That's who it was.
Q. Tell us when you reached the level at which you feel that procuring funding did not enhance your professional objectives.
A. As I said a while ago, probably 15, 18 years ago. Once I reached full professor there was no reason, no benefit.
Q. Do these grants allow you to publish papers that you otherwise wouldn't be able to publish?
A. Yes.
Q. Is publishing papers something that is encouraged by the University?

A. Yes.
Q. Why is that?
A. They want you to disseminate knowledge as well. As opposed to just picking out of books, they want you to generate and disseminate knowledge.
Q. How many papers, Doctor, do you think that you have published that you would not have had an opportunity to publish but for funding from pharmaceutical companies?
MR. GOLDBERG: I object to the form of the question.
Q. Go ahead, Doctor.
A. Excuse me. Repeat that.
Q. How many papers have you published that you would not otherwise have had an opportunity to publish but for funding from a pharmaceutical company?
A. Not that many, actually, because

those, I published several hundred, and most of those were really on my own. It is only in the past, when I started doing clinical trials, and they didn't, they take so long to carry out and to do, you probably could have less than 10, I would

15

guess, maybe even less than 15 would probably be safer. Not very many.

Q. Give me your best estimate of the number of papers that you have published that have in any way been supported by a grant or other funding from any pharmaceutical company.

MR. GOLDBERG: Objection, asked and answered.

MR. ROWLEY: It's a different question.

Q. Go ahead, Doctor.

A. Definitely less than 15. It could even be less than 12 or so. I would have to, again, pull out my resumé to really tick them out to be able to see.

(Off the record.)

VIDEOGRAPHER: We are now back on the record.

BY MR. ROWLEY:

Q. Doctor, in how many prior lawsuits have you given testimony, either by deposition or at trial?

A. Two. I believe it is two others. It may even be three others, to be really honest. I

16

don't, it's something that I just don't really think of and keep track of them. It could be two or three. I'm not sure, to be honest.

Q. When was the first time you gave testimony either by deposition or at trial?

A. Probably about three years ago.

Q. What case was that?

A. I think -- Can I look at --

Q. Absolutely. Sure.

A. I believe --

Q. Are you looking at your CV?

A. No. But that would be an easy, it would be difficult to find there because it is so large. But here, here are two, and these are two that I definitely remember.

Q. What is it that you are looking at?

A. Just one of the reports that I submitted, at the bottom.

Q. One of the reports that you submitted for this case?

A. Not for this case.

MR. GOLDBERG: It's the report dated May 25, 1999, which has been submitted in this case.

17

Q. Is that the IBEW report?

A. Yes. The two down there at the bottom that I have listed.

(Deposition Exhibit No. 1 marked for identification.)

Q. Doctor, I have marked that report as Exhibit 1. I'm handing you Exhibit 1. Is that a

copy of your May 25, 1999, report?
A. Yes.
Q. Direct me to the page --
A. The --
Q. Excuse me, Doctor. You need to wait until I get done with the question.
A. Should be -- I'm sorry.
Q. For purposes of the deposition, you need to wait until I finish with my question before answering.
A. Sure.
Q. Can you direct me to the page where you list prior cases in which you have testified?
A. 13.
Q. Which was the first case?
A. '94-'95.
Q. You said that there might be a third

case in which you testified?
A. Actually, yes. There's those two, and then this one that you, in fact, are holding, which is the IBEW. Then this, I guess, would be the fourth.
Q. I asked you about cases in which you testified. Did you testify, Doctor, in the IBEW case?
A. No.
Q. Did you give a deposition?
A. Yes. Deposition meaning your --
Q. No, sir.
A. This is not a deposition?
Q. Did you sit in a conference room with a lawyer and answer questions?
A. No.
Q. Doctor, you need to please wait until I finish the question until you answer.
In the IBEW case, did you sit in a conference room or in another setting like the one today and answer questions posed by a lawyer?
A. No.
Q. So as I understand it, the only two cases in which you have given testimony, either by

deposition or at trial, are listed on page 3 of Exhibit 1; is that right?
A. Now, if your definition of actual sitting in a courtroom or with others, this would be the only one.
Q. Have you generated reports in any cases, any cases in litigation, other than the two listed on page 13 of Exhibit 1 and the IBEW case?
A. This one as well.
Q. Are there any others aside from those four cases?
A. No.
Q. Have you submitted affidavits in any litigation, aside from the four cases that we have just mentioned?
A. No.
Q. Have you ever been involved in any, have you ever been involved in any way in litigation, aside from the four cases that we have mentioned?

A. No.
Q. Have you ever been a plaintiff in a lawsuit?
A. No.

20

Q. Have you ever been a defendant in a lawsuit?
A. No.
Q. Have you ever been threatened with a lawsuit?
A. No.
Q. Tell us, what was the subject matter of the Samuel case, which is the first case that you listed on page 13 of Exhibit No. 1.
A. That had to do with a patch study.
Q. A patch study?
A. Uh-huh. Nicotine patch study.
Q. Who was the manufacturer of the nicotine patch that you were studying?
A. Lederle Laboratories.
Q. Was that study performed by the Tobacco Research Center?
A. No.
Q. Who was it performed by?
A. It was a multi-center site, and other people did it, actually conducted that. I did not do it.
Q. Were you involved in any way in the study that was the subject matter of the Samuel

21

case?
A. No.
Q. On whose behalf did you testify in the Samuel case, the plaintiff or the defendant, the person sued or the person who was --
A. The person being sued.
Q. That would be the pharmaceutical company?
A. Correct.
Q. Have you had any affiliation with the defendant in that case before being retained on their behalf to testify?
A. No.
Q. What was the subject matter of the lawsuit?
A. It had to do with the patch, that people thought that it had damaged them neurologically, or the patch had done some damage to them, if I remember right.
Q. You say people had thought that. What people thought that?
A. Samuels.
Q. Was there one plaintiff in that case?
A. Yes.

22

Q. Did you testify at trial in that case?
A. No.
Q. How was the case disposed of?
A. Once I had the report and they looked at the report, it was not pursued any further.
Q. You are asserting that the case was dismissed because of your report?
A. I just never heard thereafter. They

thought it was dismissed or they didn't pursue it. So I can't really tell you it was because of the report.

Q. You don't, do you know why the case was dismissed?

A. No.

Q. What specific injury was the plaintiff claiming in the case?

A. That it had done neurological damage.

Q. What kind of neurological damage?

A. Brain damage, I believe.

Q. What kind of brain damage?

A. The plaintiff thought that it had shrunk their brain, is the quote.

Q. Was your opinion that use of the nicotine patch shrunk the plaintiff's brain?

A. No.

Q. What opinions did you render in the case?

A. Basically, I just talked about the patch and the amount of nicotine it had in it and so forth. Just basically looked at the report and then responded to some questions that were asked of me.

Q. You say basically you looked at the report. What report?

A. I think the report where the person was actually making these claims. I don't know what you would call that in your --

Q. The Complaint?

A. Yes. I guess so.

Q. Did you look at medical records?

A. I can't remember if I did in that one or not, to be really honest. I don't think I did there, because to me it was so obvious that it was not. I don't think we ever got to that point.

Q. What was obvious?

A. That it did not shrink his brain.

Q. Have you had any affiliation or contact with this pharmaceutical company that was

the defendant in the Samuel case since that case was dismissed?

A. No.

Q. Doctor, you really need to wait until I finish my question.

Have you had any affiliation with this defendant in the Samuel case since the case was concluded?

A. No.

Q. Do you have a copy of the deposition that you gave in that case?

A. No, I don't.

Q. Do you recall the law firm that took your deposition?

A. No, I don't.

Q. Do you recall the law firm that retained you on behalf of the defendant?

A. No, I don't.

MR. GOLDBERG: I want to object for the record. The witness made it clear that he was equating deposition with report, because you --

MR. ROWLEY: I thought we had cleared that up.
MR. GOLDBERG: But you seem to be

25

under the impression that he actually gave testimony before, and I think he said he did not.
MR. ROWLEY: I thought we had cleared that up earlier.
We don't need to discuss it then.
BY MR. ROWLEY:
Q. Doctor, in the Samuel case did you go through a process like the process today where a lawyer asked you questions?
A. No.
Q. You just did a report in the Samuel case; is that right?
A. Right.
Q. In the Steiner case did you give a deposition as opposed to simply drafting a report?
A. No. Just a report.
Q. So with the clarification of what a deposition is, am I correct in saying that you have never given a deposition before?
A. Correct.
Q. Do you still have a copy of the report that you did in the Steiner case?
A. No. I do not.
Q. How come?

26

A. I switched computers. I actually looked for it, but evidently when I switched computers, as I do several times, that just wasn't on my computer.
Q. Why did you look for it?
A. Because you, I was asked about, to identify other cases, and I was trying to see if I had any of this on my computer.
Q. How do you know the case was dismissed, the Samuel case?
A. I don't know. I was just never contacted further.
Q. It could have been that it proceeded without your participation?
MR. GOLDBERG: Objection. The doctor said he doesn't know.
Q. It could have been that it proceeded without your participation; is that right?
A. It is possible. But if I remember correctly, I was told -- I'm trying to recall because I haven't had to think about that -- that it was just not going to go any further, in other words, it was not pursued any further.
Q. What was the subject matter of the

27

David L. Steiner vs McNeil Laboratories case?
A. In that in particular, David Steiner asserted that a patch had caused him to have a heart attack.
Q. Is that case still pending? Is it still going on?
A. Not to my knowledge, no.
Q. What was your involvement in the Steiner case?

A. Again, I was contacted and asked to draft a report.
Q. You were contacted by McNeil Laboratories?
A. I believe that was the lawyers in Pittsburgh who contacted me, just happened to be McNeil, the company that was selling the patch. But I was contacted by lawyers in Pittsburgh.
Q. The lawyers for McNeil contacted you, is that what you're saying?
A. I think they ultimately, I'm assuming they were. I didn't ask. But I was contacted by lawyers in Pittsburgh.
Q. Did you do a report on behalf of or at the request of the plaintiff or the defendant in

that case?
A. I did it for the defendant.
Q. And the defendant was McNeil Laboratories?
A. Yes. I didn't submit the report to them. Again, I submitted it to a lawyer. I am sure they were together, but they never specifically told me that the lawyers were working for McNeil.
Q. It was your understanding that the lawyers were working for the defendant?
A. You mean McNeil? Yes.
Q. Do you have a copy of that report?
A. Yes.
Q. May I see it, please, Doctor?
A. Uh-huh.
Q. Doctor, I'm going to mark the report that you drafted in the McNeil case as Exhibit 5. We have some other exhibits that we are going to identify later that have earlier numbers.
(Deposition Exhibit No. 5 marked for identification.)
MR. GOLDBERG: For the record, that report may be protected by the attorney

work-product privilege. We are producing it here solely for purposes of your confidential review.
MR. ROWLEY: I'm sorry, sir. I can just barely hear you.
MR. GOLDBERG: I'm objecting to any disclosure of that report, because it may be protected by the attorney work-product privilege.
We are not in a position to waive that privilege. We are producing it solely for your examination in connection with this case and not for any publication that would, without the express waiver of the attorney to whom the report is addressed.
BY MR. ROWLEY:
Q. Doctor, did you sign any kind of confidentiality agreement in the Steiner case?
A. I can't remember, to be really honest.
Q. Did you agree in that case to keep the report that you drafted confidential?
A. I don't know if I was ever asked that specifically. I really can't remember, to be honest.

Q. You don't recall having been told to keep the report in the Steiner case confidential;

is that true?
A. I am sure that I was asked that when it was going on, but I can't recall that. When it was going on, I don't --
Q. I don't know that means. Were you told or not to keep your report confidential?
A. I don't know. I can't remember.
Q. Doctor, you need to try and refrain from answering until I am done with the question. Would you try and do that for me?
A. Uh-huh.
Q. Is it correct that you can't recall whether you were asked to keep the report confidential? Is that true or not?
A. Yes.
Q. Was it your understanding in either the Steiner case or the Samuel case that you might be called to testify on behalf of the defendant in either case?
A. Could you ask the question again?
Q. Sure. Was it your understanding in either the Samuel case or the Steiner case that you might testify at the trial of either case?
A. Yes.

Q. Was that the purpose for which you were retained?
A. Yes. I believe.
Q. It's your understanding that you were retained for the purpose of appearing at trial and expressing the opinions contained in your report rather than as a mere consultant? Do I understand that correctly?
A. That's my understanding. Again, it is difficult to recall some of those things. But I assumed that they went hand and hand. It may not be. I didn't realize that there, in fact, might be a difference.
Q. Did they discuss with you the possibility of testifying?
A. Not for, until we finished these reports, no. I don't remember them ever discussing that.
Q. Did they discuss it after you did the reports?
A. No.
Q. What's the current status of the Steiner case?
A. I think that one in particular as

well, it was not pursued any further. The defendant, or the plaintiff did not pursue it. At least that's what I was told. That I remember a little bit better. It's more recent.
Q. Was Mr. Goldberg or his firm involved in that case?
A. No.
Q. When I asked you if you had a copy of the report, it was Mr. Goldberg who handed it to you, right here in the deposition; right?

A. Yes. Is that the second one?
Q. No. The report in the Steiner case.
A. Yes.
Q. How did he get it?
A. He had asked me if I had testified in any when he saw this question, and I provided that report to him.
Q. Mr. Goldberg got the report because you gave it him?
A. Right.
Q. Did you tell him that it was confidential when you gave it to him?
MR. GOLDBERG: Objection. You're not, objection and direct you not to answer the

questions about your communications with me.
Q. Is Mr. Goldberg your lawyer, Doctor Glover? Does he represent you as well as the plaintiffs in this case?
A. I don't think he represents me.
Q. Have you retained him to represent you personally?
A. No.
Q. Has he ever been your lawyer for any purpose?
A. No.
Q. You're not his client; right?
A. No.
Q. When you gave Mr. Goldberg a copy of the report that's been marked as Exhibit 5, that is, the report in the Steiner case, did you tell him that you were giving him a confidential report?
A. I don't know whether it was confidential. I think at the time it was.
Q. Doctor, I didn't ask you whether it was confidential. I asked you what you told him. Did you tell him that?
A. No. I did not.
Q. Did you get the lawyers' permission --

and by "lawyers" I mean the lawyers in the Steiner case -- to show the report to Mr. Goldberg?
A. No. I did not.
Q. You obviously felt that there was no problem in showing this report to Mr. Goldberg; is that true?
A. Correct.
Q. What opinions did you render in the Steiner case? Just give me a thumbnail sketch of the opinions.
A. That the patch was not responsible for the individual's heart attack.
Q. By "responsible" what do you mean?
A. That the patch did not cause his heart attack.
Q. You gave causation testimony in that case; is that right?
A. Yes, some.
Q. I'm sorry?
A. Yes, some.
I guess maybe I need to ask you specifically when you say "causation" what exactly you mean?

Q. Did you testify as to the cause of the

35

plaintiff's heart attack in the Steiner case?
A. Yes.
Q. Are you a medical doctor?
A. No.
Q. Did the case get to a point at which a judge assessed whether you were competent to testify on the issue of medical causation?
A. No.
Q. Are you an epidemiologist?
A. No.
Q. Are you a biostatistician?
A. No.
Q. As opposed to clinical studies, or as distinguished from clinical studies, have you ever conducted an epidemiologic study, that is to say, a population study?
A. We collect that data, but I have never collected, specifically go out and conducted an epidemiological study.
Q. You understand there's a difference between collecting data and conducting a study?
A. Yes.
Q. You personally have never conducted an epidemiologic study?

36

A. No.
Q. Do you hold yourself out to your peers as an epidemiologist?
A. No.
Q. Do you hold yourself out to your peers as a medical doctor who is competent to diagnose cardiovascular disease or coronary heart disease?
A. No.
Q. Do you hold yourself out to your peers as an expert who is competent to diagnose myocardial infarction?
A. No.
Q. You, of course, are not a cardiologist?
A. No.
Q. Or an oncologist?
A. No.
Q. Or a radiologist?
A. No.
Q. Or a pulmonologist?
A. No.
Q. Or any other subspecialty of medicine that requires a degree in medicine?
A. No. I think when I answered that I

37

was not a physician that includes all of those. That is sort of repetitive.
Q. I can infer that, but I want to confirm that that is correct.
When, Doctor, you expressed or wrote down opinions on the issue of medical causation in the Steiner case, what criteria for causal inference did you employ?
A. What do you mean "criteria for causal inference"?
Q. Doctor, are you familiar with a

generally-accepted phrase in the medical and epidemiologic literature that is referred to as "causal criteria"?

A. Yes.

Q. That's what I mean. So let me ask you the question again.

When you expressed opinions regarding the subject of medical causation in this report, in the Steiner case, what criteria for causal inference among all of the various sets of available criteria for causal inference did you use?

MR. GOLDBERG: Object to the question.

The doctor has said he is not an epidemiologist and is not a medical physician, nor is he being offered for testimony in those areas. The doctor is here being offered for testimony with respect to treatment of nicotine dependence.

MR. ROWLEY: Maybe we can shortcut this.

Q. Doctor, you agree that since you are not a medical doctor you are not competent to diagnose any medical or psychological condition; correct?

A. No medical condition. I think psychological might be different. The medical, I think you are correct there.

Q. Let's make sure that that is clear on the record.

You acknowledge that you are not competent to diagnose any medical condition?

A. Correct.

Q. You're not a pharmacologist, of course?

A. No.

Q. You don't hold yourself out to your peers as a pharmacologist or as an expert in

pharmacology, do you?

A. No, I do not.

Q. You are not competent, therefore, to make pharmacologic diagnoses; that's true?

A. I guess I'm not sure what you mean by "pharmaclogic diagnosis," because we determine what treatments are, might be affected, and we are working with drugs. You don't have to be a pharmacologist to be able to do that.

Q. Why don't you tell us what conditions you believe you are competent to diagnose as a non-physician?

A. That's awfully broad. Could you be more specific?

Q. No, I can't. I would like you to give me examples.

A. The determining, if you come in and we are going to give you the gum and we find out you have dentures, obviously, you can't chew gum. You might use the patch. There's a relatively simple one.

Q. Let me, let's stop there. What diagnosis is involved in that assessment?

A. It's a pharmacological, which one we

are, in fact, going to use, which pharmacological adjunct we are going to use with that individual.

Q. Doctor, do you know what a diagnosis is?

A. Yes. At least I believe I do.

Q. And you would consider the decision as to which type of cessation aid to give a person to be a diagnosis?

A. The individual, we determine that by diagnosing the individual. It is not diagnosing the medication. In other words, when the individual comes in, we visit with that individual to see what, in fact, might be appropriate for that individual in terms of treatment.

Q. Doctor, you are familiar with the DSM IV?

A. Yes.

Q. It is a manual of criteria that are used to assess and reach conclusions regarding the diagnosis of various conditions?

A. Uh-huh

Q. Are you competent to reach the diagnoses that are contained in the DSM?

A. Taking a look -- well, some. In other

words, you can be trained to actually administer tests, something like the SCIDS or a SAAST or whatever to see if a person is, in fact, a potential alcoholic or something.

But most of those I would say no. I'm very specific to tobacco.

Q. Doctor, does the law in the State of West Virginia allow you to render a diagnosis with respect to whether someone is alcohol-dependent?

A. No.

Q. Does the law within the State of West Virginia allow you to render a diagnosis as to whether someone is nicotine-dependent?

MR. GOLDBERG: Objection. This witness is not called as an expert on the law. The question of --

MR. ROWLEY: If we could stop the speaking objections, I would appreciate it. The correct procedure is for you to object to the form, and I would appreciate it if you would limit your objections to form objections, as you know.

MR. GOLDBERG: I will make appropriate objections.

MR. ROWLEY: And please don't coach

the witness.

MR. GOLDBERG: I'm not coaching the witness. And I'm not allowing you to confuse the witness or get beyond the area of the witness's expertise.

My objection is that you are asking the witness to give testimony regarding legal requirements.

BY MR. ROWLEY:

Q. Doctor, you told me that under the law of the State of West Virginia it is your understanding that you are not permitted to render

a diagnosis as to whether someone is alcohol-ependent. Did I understand that question correctly?

A. Yes.

Q. Under the law of the State of West Virginia, are you permitted to render a diagnosis as to whether an individual is nicotine-dependent?

A. I don't know that, because, to be really honest.

Q. If I understand your testimony, you don't know whether the law of the State of West Virginia permits you, with your background,

experience and qualifications, to render a diagnosis as to whether someone is nicotine-ependent?

MR. GOLDBERG: Objection. Unless you can be specific as to what law you are referring to so that we can see what you mean by "the law," I don't know how this question can be answered.

Q. Go ahead, Doctor.

A. Would you repeat the question?

MR. ROWLEY: Could you read it back, please?

REPORTER: "If I understand your testimony, you don't know whether the law of the State of West Virginia permits you, with your background, experience and qualifications, to render a diagnosis as to whether someone is nicotine-dependent?"

A. We do that. I guess I'm, we can decide if someplace is nicotine-dependent or not.

Q. Doctor, I'm not asking you what you do. I'm not asking you what other folks who you work with do. The question that I'm asking you is a completely different question from the one that you answered. So I'm going to ask you the question

again. I would ask you to please try and answer the question that I ask you.

Do I understand your testimony correctly that you do not know whether the law of the State of West Virginia permits you to render a diagnosis of whether a person is nicotine-ependent?

MR. GOLDBERG: Objection to the form of the question, to the lack of specificity of the question, and to the question having already been asked and answered.

Q. Go ahead, Doctor.

A. Yeah. I'm not familiar with the law.

Q. Does that mean that your answer to the question is that you don't know whether the law permits you to render such a diagnosis?

MR. GOLDBERG: Objection, asked and answered.

Q. Is that what that answer means?

A. Would you read the question? Sorry about that.

Q. Do you really not understand the question that I'm asking you?

A. No. But it requires more than just a

simple answer, because it is being done by nurses, health educators, a lot of people, by administering tests in terms of to be able to see if a person is nicotine-dependent. Using a Fagerstrom or a variety of things we determine whether a person is nicotine-dependent or not, to assist them. So we all do that. To be perfectly honest, I don't know if there is really a law that says that we can't or that we can.

Q. You don't know whether that activity is legal in the State of West Virginia or not?

MR. GOLDBERG: I object to this. This is completely inappropriate.

MR. ROWLEY: I'm just trying to get a straight answer to the question.

MR. GOLDBERG: You have gotten straight answers, and your line of questioning is completely inappropriate.

MR. ROWLEY: If he will give me a straight answer --

MR. GOLDBERG: He's given you a straight answer.

Q. Humor me and give me a straight answer.

A. I think I have.

Q. You don't know whether that is legal or not; correct?

MR. GOLDBERG: This has been asked and answered. I object to the continuing line of questioning. I move to strike the line of questioning as well.

Q. Please answer the question.

A. I have.

Q. Humor me and give me an answer.

MR. GOLDBERG: I object. The witness has answered --

A. I have answered it several times. I don't know what else you want, other than to just keep repeating it.

I told you that it is done by nurses and health educators and a variety of people who have been trained in using a variety of tests to be able to, in fact, see if the person is nicotine-dependent so that we can assist them. And we all do that.

Q. Doctor, have you ever checked to determine whether or not it is lawful for a person that has neither a medical degree nor a medical

license to render a diagnosis of nicotine dependence within the State of West Virginia?

MR. GOLDBERG: Same objections, to the form and to asked and answered.

A. Every psychologist in West Virginia would probably do that, and they are not physicians. So I would think that every psychologist or health educator in the state then, what you're trying to imply, is breaking the law, which is, you know, if they are administered to give those tests. They are psychologists; they are not psychiatrists; they are not physicians.

So I think that's not, I could almost

guarantee you -- I don't know. I haven't checked every law on everything that I do. But, in fact, I'm almost positive. I mean, it's done by the entire state, all over the country. Psychologists are not physicians, and they make that determination.

MR. GOETZ: On behalf of Reynolds, I move to strike that answer as not responsive.

MR. ROWLEY: Let's read the question back, please. Doctor, I would ask you to please listen to the question and try your best to give an

answer that is responsive to the question.

MR. GOLDBERG: I object to those kinds of statements. The witness has answered your questions and responded to the questions to the extent that they are proper and to the extent that he is able. Now you are badgering the witness.

MR. ROWLEY: Let's read it back, please.

REPORTER: "Doctor, have you ever checked to determine whether or not it is lawful for a person that has neither a -- "

MR. ROWLEY: Has neither a medical degree nor a medical license.

REPORTER: "Doctor, have you ever checked to determine whether or not it is lawful for a person that has neither a medical degree nor a medical license to render a diagnosis of nicotine dependence within the State of West Virginia?"

MR. GOLDBERG: And will you read the answer that was given to that question, please?

MR. ROWLEY: No. We're not going to do that. We're not going through this. We're not reading long answers. The answer was given. It's in the record. It was not responsive. There was a

motion to strike. This is an attempt to waste time. It is an attempt to facilitate the witness evading the question. I want the witness to answer the question.

Q. Doctor, do you need the question read back again?

MR. GOLDBERG: Just a minute. You just read the question to the witness, and the witness is entitled to hear the answer given. He doesn't have to answer the same questions over and over again.

Q. Doctor, do you need the question read back again or not?

A. No. And I would respond as I have before. Almost every psychologist in the country that is involved in nicotine dependence, every health educator in the country does that. So I'm assuming that if it against the law then everyone is.

But in specifically responding, I have never specifically checked whether it's legal. But if it is, there is hundreds of thousands of psychologists and so forth that are breaking it. You don't need a medical degree to be able to do

that.

Q. Did you ever consider checking?
A. No.
Q. Do you distinguish addiction from dependence, Doctor?
A. To me, I don't particularly. I know that some others do, but that's ...
Q. For purposes of diagnosing either addiction or dependence, does the law distinguish between them?
MR. GOLDBERG: Objection, unless you cite what law you are referring to. There is no way for this witness to possibly answer the question or for us to even know what you are referring to.
Q. Well, Doctor, now you know what the lawyer wants you to say. Would you like the question read back, or can you answer the question?
MR. GOLDBERG: I move to strike your comments since you refuse to ask proper and clear questions.
Q. Do you need the question read back, Doctor?
A. Yes.

REPORTER: "For purposes of diagnosing either addiction or dependence, does the law distinguish between them?"
A. I think the DSM-IV does. I don't know if the law specifically does.
But I work in treatment, and I try not to get caught up in the operational definitions, because people try to tweak them a little bit, Well, no, you mean this or that, or whatever. They try to play what I perceive as games with that.
I just typically will use the word either "addiction" or "dependence." And I personally use them interchangeably.
Q. Are you legally permitted to render a diagnosis with respect to addiction?
MR. GOLDBERG: Same objection, lack of specificity as to what you mean by "legally."
And asked and answered.
Q. Go ahead, Doctor.
A. We determine, I can tell you that we determine if a person is addicted or not that comes into our Center, tobacco, to nicotine.
Q. Who are "we"?
A. The Tobacco Research Center staff,

myself.
Q. Are you personally legally permitted to diagnose addiction?
MR. GOLDBERG: Same objections as previously made.
A. You know, again, you have asked that question so many times just different kinds of ways.
Q. It is a different question.
MR. GOLDBERG: Objection. It is asked and answered.
Q. Do you need it read back, Doctor?
A. No.
Q. Would you please answer it?

A. I have. I don't know what else you, I don't know what else, how else you want me to answer it.
Q. I would like to know whether you believe you are legally permitted to render a diagnosis on the issue of addiction. I would just like to know whether --
A. On the issue of addiction or ...
Again, I work strictly in the tobacco area. And what we do is we can, in fact, determine

53

if a person is addicted. And we do that all the time.
Q. The thing that I would really like to know, I mean, I would really like an answer to this question, is it your understanding that you personally are legally permitted to render a diagnosis as to whether an individual is addicted to a substance?
MR. GOLDBERG: Objection, asked and answered, calling for an answer beyond the witness's area of expertise. If you want a ruling on that question, you can brief it and ask the trial judge.
Q. Go ahead, Doctor.
A. You said on all addictions. Again, I just feel comfortable with tobacco. You said addictions. You didn't say, if I remember correctly, you didn't say nicotine addiction.
Q. Doctor, did I ask you what questions or issues you are comfortable with?
A. No.
MR. ROWLEY: Could you read the previous question back, please?
REPORTER: "The thing that I would

54

really like to know, I would really like an answer to this question, is it your understanding that you personally are legally permitted to render a diagnosis as to whether an individual is addicted to a substance?"
MR. ROWLEY: Is there an answer to that, the doctor's answer?
REPORTER: No. There's just an objection. You said, "Go ahead, Doctor."
Q. Go ahead, Doctor.
REPORTER: And you said, On addiction, again, I just feel comfortable ...
A. Again, I'm talking specifically about tobacco addiction. I'm not talking about all other addictions. My expertise is treating people and helping them, or at least make attempts at quitting smoking. That's what we do, is we treat individuals. Obviously, the majority of these people that come in are, in fact, addicted. So what we try to do is assist them in some way.
Q. Is addiction a psychological or a physiological medical condition?
A. It is both. It is primarily a physiological one.

55

MR. GOLDBERG: Are you moving into a new area? Because we would like a break.

MR. ROWLEY: We can take a break.
(Break.)
VIDEOGRAPHER: We are now back on the record.
MR. GOLDBERG: Thank you for the break.
BY MR. ROWLEY:
Q. Doctor, did you talk with the Plaintiffs' lawyer during the break?
A. Yes.
Q. Who initiated the conversation?
A. I think he did.
Q. Did you do anything else during the break?
A. Urinated.
Q. Did you talk to him before or after that?
A. I think during.
Q. What did you talk about?
A. He said, Just relax. That was all he said.
Q. Did you talk about any of the

questions that have been asked?
A. No.
Q. Did you talk about any of the answers that you have given?
A. No.
Q. Did you ask him any questions?
A. I asked him, I think when we came up here, or, no, I didn't ask him a question. I just made a comment.
Q. What comment did you make?
A. It's a beautiful view from out there in the main lobby.
Q. Did you make any comments about your testimony or the subject the lawsuit?
A. No.
Q. Did he make any comments about your testimony or the subject of the lawsuit?
A. No. He did not.
Q. Did he talk to you at any time about whether he is permitted to discuss the lawsuit or your testimony during breaks with you?
A. No.
Q. Did he caution you not to speak with him about the deposition or the subject matter of

your testimony while the deposition is going on?
A. No. Not --
Q. He didn't talk about --
I'm sorry. Go ahead.
A. No. I don't remember. I just assumed that we probably shouldn't be talking about it. But I don't believe he ever specifically told me anything.
Q. Why did you assume that?
A. Huh?
Q. Why did you assume that?
A. I don't really know. I just thought since all of this was confidential or something we probably should not be doing that.
Q. Does the diagnosis of dependence in

West Virginia require any type of license?
A. I don't know about dependence.
Q. You don't know? Does the diagnosis of addiction in the State of West Virginia require any type of license?
A. Again, as I mentioned, or this question before, is I'm assuming that it doesn't. But I don't know specifically, because every health educator, every psychologist, in fact, can look at

dependence and make that determination. Therefore, I'm just assuming that, you know, other than physicians can actually do that, specifically relative to nicotine dependence.
Q. You assume that the diagnosis of addiction does not require any type of license, but you do not know. Is that a fair summary?
A. That's correct. You keep coming back to addiction. I'm specifically referring to nicotine dependence.
Q. Doctor, I get to ask you questions about any subject, essentially, that I want that is relevant to the lawsuit, and I'm asking you about addiction.
A. Let me give you a response then, that I don't think that that is, that is a secondary expertise of mine. That's not what I'm really here for. It's to really discuss the addiction. At least, that's not what I was asked to do.
Q. For purposes of this lawsuit, the lawyers have not asked you to address the issue of addiction?
A. Correct.
Q. Do I take it from that that they have

not asked you to address the issue of the diagnosis of addiction?
A. I don't --
Q. Is that correct?
A. Again, I don't know about the diagnosis. I'm not really quite sure on that. But the addiction is, that's a secondary expertise of mine. Mine is actually in the treatment of trying to help people quit smoking.
Q. They haven't asked you to render any specific opinions regarding the diagnosis of addiction, have they?
A. No.
MR. GOLDBERG: The opinions --
MR. ROWLEY: No, no, no, counsel. He has already answered, counsel. If you have an objection to the form, make the objection. Do not coach him.
MR. GOLDBERG: I will do as is appropriate.
MR. ROWLEY: If you do, if you keep coaching him we are going to stop and move for sanctions.
MR. GOLDBERG: You do whatever you

think is appropriate, and I will do what I think is appropriate.
MR. ROWLEY: Stop coaching him.

MR. GOETZ: On that grounds I join in that.
MR. ROWLEY: This deposition is not going to last much longer if you continue feeding him answers.
MR. GOLDBERG: I object to your questions about what the witness is being called to testify about. You have reports from the witness outlining the areas that he will be testifying in, and those reports speak for themselves.
BY MR. ROWLEY:
Q. Doctor, does the diagnosis of dependence under DSM-IV require any qualifications?
MR. GOLDBERG: Objection. Would you be specific by showing us what you are referring to, please?
Q. Do you need the question read back, Doctor, or can you answer?
A. No. Could I see what you are referring to, though, in the DSM-IV specifically?
Q. Doctor, have you ever read the DSM-IV?

A. Yes.
Q. Have you looked at the criteria for assessing substance dependence in DSM-IV?
MR. GOLDBERG: Counsel, I object. Are you refusing to show the DSM-IV to the doctor when you refer to the DSM-IV and the doctor asks to see it, what you are referring to? Are you refusing to do that?
Q. Doctor, have you seen the criteria for assessing the issue of substance dependence in the DSM-IV?
A. Nicotine dependence?
Q. Substance dependence.
A. I'm sure I have seen that.
Q. Does the application of those criteria to an individual require any qualifications at all?
MR. GOLDBERG: Counsel, I object. The doctor has asked to see what you are referring to. Are you refusing to show the doctor what you are referring to?
Q. Do you need --
MR. GOLDBERG: What section are you referring to?
Q. Do you need the question read back,

Doctor?
A. I would like to see that. You can see the size of that. It's virtually impossible to remember everything that is virtually in there. I would like to specifically see what you are referring to so I could respond to it. I want to respond, but you're having me to respond to things I can't see.
Q. Is it your testimony, Doctor, that as you sit here you can't tell us and you can't tell the Court whether any qualifications are necessary to apply the substance-dependence criteria in DSM-IV without looking at the DSM-IV? Is that your testimony?
A. Yes.
Q. With respect to nicotine dependence

specifically, can you tell us without, actually looking it up in the DSM-IV, whether any qualifications are necessary in rendering that diagnosis?

MR. GOLDBERG: Object to the form. Are you referring to under DSM-IV, or are you referring to some other standard? You have asked an open-ended question.

63

Q. Go ahead and answer.

A. Could I have the question again, please?

Q. Yes.

REPORTER: "With respect to nicotine dependence specifically, can you tell us, without actually looking, it up in the DSM-IV whether any qualifications are necessary in rendering that diagnosis?"

A. I believe the manual is designed to provide diagnostic and statistical information on these mental disorders. It doesn't give you standards of whatever. It is put out by psychiatrists primarily who are involved in it. But it's really the manual. It shows you what, in fact, constitutes an addiction or does not or whatever, and people refer to it all the time.

So it doesn't say that you have to be a physician to do that, just like it doesn't say you have to be a nurse or anything else. Relative to nicotine dependence, it doesn't say that you have to be a physician to read that or to see that or to render a diagnosis of nicotine dependence.

Q. What qualifications, if any, are

64

necessary to render a diagnosis of nicotine dependence under DSM-IV?

MR. GOLDBERG: Objection, asked and answered.

A. Yeah, I thought I, I just thought I answered that. I would just repeat the same thing as before. Again, you just asked the same question a different kind of way.

Q. Doctor, I'm marking a sheet of paper as Exhibit 6.

(Deposition Exhibit No. 6 marked for identification.)

Q. Do you have a pen?

A. Yes.

Q. Write down the qualifications that are necessary for someone to reach a diagnosis of nicotine dependence under DSM-IV.

MR. GOLDBERG: I object. The doctor has asked to see the DSM-IV. Now you are engaging in a trick question. You are asking for, you are testing his photographic memory, I think, with this question.

Are you refusing to show the doctor the section of DSM-IV that you are referring to?

65

Q. You can answer the question, Doctor.

A. I guess I'm not, I have answered that question several times. I don't know what else you want. You know, I have answered it in several

different ways, and you have asked it several different ways.
Q. Let me ask you a different question now.
A. Okay.
Q. Are you able, without looking at the DSM-IV manual, to write down any of the qualifications that are necessary in order to reach a diagnosis of nicotine dependence under DSM-IV? Are you able to do that? That is a "yes" or "no."
MR. GOLDBERG: Objection, unless you define what you mean by "qualifications."
Q. Are you able to do that? "Yes" or "no," Doctor?
A. In other words, we can make determinations of what -- you are talking about the qualifications of the individual?
Q. Yes.
A. If the individual has spent X amount of years studying and working with nicotine

dependence, if he knows how to administer a variety of nicotine dependence tests, like the Fagerstrom, FTND, FTQ, and really in administering these can look at CO levels, can look at a variety of things, possibly the number of cigarettes, you look at many different kinds of things to determine whether a person is addicted or not. You look at the definition of what a smoker is and so forth.
So there is a whole variety of things that can, that are there. And virtually anyone can do that. I mean, if you are trained and have taken the test, like I have been trained to administer SCIDS tests, depression inventories, and I'm not a psychiatrist, but yet I have been trained to administer certain tests.
Q. What do you mean by "virtually anyone can do that"?
A. I mean other than -- You keep implying that only physicians can do most of this, and they could do some of it. But that is just simply not true.
Q. Doctor, I haven't mentioned physicians or medical degrees --
A. In every other sentence.

Q. -- or licensure for many questions. So maybe we can get an answer to the question that I asked.
A. I have tried. I would like to move on. I have answered as best I know how.
Q. Answer "yes" or "no." Can you give us the qualifications --
A. I have answered as best I know how.
Q. I don't know whether the answer is yes or no. If the answer is yes, I would like you to write the qualifications on Exhibit 6.
MR. GOLDBERG: I object. The witnesses has repeatedly answered it. You are arguing with the witness and badgering the witness.
A. I have answered it several times. I don't know what else to do. I would like to move on to another question if at all possible.

Q. Is there a particular degree that is required in order to apply the DSM criteria for nicotine dependence?
A. I wouldn't think so.
Q. Is there a particular certificate or certification that is required to apply the DSM-IV criteria for nicotine dependence?

68

A. Not that I know of.
Q. Is there a particular program that must be completed as a prerequisite to applying the DSM-IV criteria for reaching a diagnosis as to a nicotine dependence?
A. Usually that's a recommendation that they, in fact, do make. It's nice if you have taken some kind of training relative to be able to diagnosis nicotene dependence.
Q. Is it required?
A. It is recommended, I believe.
Q. Is it required?
A. No.
MR. GOLDBERG: Objection, asked and answered.
A. It is recommended.
Q. Is it required? Did you say no?
A. It is recommended. That implies that it is not.
Q. Right. I can infer from your answer that the answer to my other question was no. Is the answer no?
A. To what question?
Q. Are different qualifications required

69

for diagnosing addiction versus diagnosing dependence?
MR. GOLDBERG: Objection to the form of the question.
A. I told you I use the words interchangeably. I try not to get involved in trying to distinguish those little subtle differences. I use the words interchangeably.
Q. Again, I might be able to infer the answer to my question from what you just said; but I would appreciate it if you would answer the question I asked.
MR. GOLDBERG: Objection. The witness has answered your question.
A. Would you repeat the question?
MR. ROWLEY: Please read it back.
REPORTER: "Are there different qualifications required for diagnosing addiction versus diagnosing dependence?"
A. Again, the book DSM-IV typically uses the word "dependence." That's the scientific name, more or less. Just like you could say cancer is the same as a malignant neoplasm. It is just people use different things. Some people would use

70

dependence and other people would use addiction. I personally use them interchangeably all the time. Even in the same sentence I might use them interchangeably.
Q. I appreciate you telling us that.

Does that mean that the answer to my question is the qualifications are the same or the qualifications are different?
A. If I use them interchangeably, for me they would be the same. If they are different they are.
Q. For you the qualifications would be the same?
A. Uh-huh.
Q. Are the qualifications different according to who you ask?
A. I don't know. It would be your operational definition of those words. I'm sure DSM-IV specifically relates to dependence; they use dependence.
Q. Are you a psychiatrist?
A. I wasn't a while ago, and I'm still not.
MR. GOETZ: I'm sorry. Could you read

that back, please?
REPORTER: The answer?
"Are you a psychiatrist?"
"I wasn't a while ago, and I'm still not."
Q. Are you a licensed psychologist?
A. No.
Q. Are there licensed psychologists in the State of West Virginia?
A. Yes.
Q. Does the Tobacco Research Center employ medical doctors?
A. Yes. We have physicians on staff.
Q. Does the Tobacco Research Center employ licensed psychologists?
A. No. I don't believe.
Q. Are medical doctors involved in the process of diagnosis of dependence, in your experience at the University, West Virginia University? Physicians, are they involved?
A. I don't know the University. I know the Tobacco Research Center they are involved.
Q. Why are they involved?
A. Because they do the medical matters.

Anytime anyone comes in for a physical or whatever, physicians, they always have do their turn with the physicians and interact with the physician as well.
Q. Physicians are involved in the diagnosis of substance dependence or nicotine dependence specifically because they are involved in all medical matters; right?
A. Uh-huh.
Q. Is that correct?
A. Yes. That's correct.
Q. Do physicians always sign off on the diagnosis of nicotine dependence at the center?
A. Yes. Ultimately, yes.
Q. Why?
A. Because when we are doing case report form it's required by the FDA.
Q. Is there any other reason why physicians always are involved in the process of

diagnosis of nicotine dependence at the center?
A. The diagnosis of nicotine dependence is basically done by the nurses and some of the counselors and social workers and so forth. They make that determination. And then the physician just basically looks at the paperwork and he

73

ultimately signs off after reading the paperwork or whatever.
Q. What is the purpose of the FDA requirement that a physician sign off on it?
A. They want to make sure that the physician has, in fact, seen the paperwork that's been signed, or that's been checked off by the counselors and so forth. In other words, they make the determination. They want to make sure, since it is possibly a, because it is not one isolated point. Let me back up slightly. It is not one, just the dependence. That is a part of a variety of things that are collected, including medical history. So the physician signs off on those to make sure that everything is, in fact, correct.
Q. Does the physician sign off on the determination or diagnosis of nicotine dependence?
A. He signs off, yes. It is all, not specifically exact form, but he signs off on all the medical matters and that's part of the things that is included in that.
Just like I ultimately sign all the paperwork because, me being the principal investigator, I'm responsible ultimately for all

74

the project. And the medical matters typically go to the physician.
Q. Are determinations of nicotine dependence at the center done for research purposes or for treatment purposes?
A. Primarily for treatment purposes.
Q. Are there other diagnoses that are made at the Center by non-physicians?
A. I think initially we might administer a Beck depression inventory to see if a person is depressed, or a SCIDS, which is a depression inventory. Again, the psychologists and some of the social workers and maybe a nurse might administer that test. But then the physician looks it over to make sure, and may inquire, ask questions.
Q. Who at the Center is permitted to render diagnoses regarding depression?
A. You want names or individuals? I mean --
Q. No. I'm talking about what kinds of people.
A. There is a health educator, a nurse, a social worker.

75

Q. The nurse is qualified, in your view, to render a diagnosis of depression?
A. Again, she collects the information. She makes the determination. The physicain looks at it and either concurs or disagrees.
Q. Who renders the ultimate diagnosis?

A. On the depression, the physician.
Q. Who renders the ultimate diagnosis with respect to nicotine dependence?
A. I think the physician will sign off, but it is the individual that actually does that, the social worker, psychologist or health educator. It is rarely that he ever disagrees, or she ever disagrees with them, other physicians that work as well.
Q. There are instances where the physician disagrees with the social worker?
A. I can't think of one. That's why I said rarely. I can't think of one specific instance where they may have said, I disagree with this. So I didn't want to say "never," because there could have been one. I just don't know.
Q. I'm not clear on your answer. If you would be kind enough to clarify it for me.

A. Okay.
Q. Who renders the ultimate diagnosis on nicotine dependence? Is it the nurse or social worker or other person who does the evaluation, or is it the physician?
A. Ultimately the physician signs off.
Q. Let's go back to a previous question that I had posed but that we got sidetracked from.
What criteria for causal inference did you use in reaching your opinions on causation in the Steiner case?
A. Basically, what I did, I looked at the information that was sent to me, and I reviewed the literature on exercise and what that might imply in terms of heart attacks.
I looked at the patch and some of the patch information and so forth.
Based on my judgment and my opinion, I wrote a report for them. And that was the end of that.
Q. Is heart disease a chronic disease?
A. I am not here to really talk about those things.
Q. You are if I ask you. Is heart

disease a chronic disease?
A. Yes.
Q. Is it a multifactorial disease?
A. Yes.
Q. A multifactorial disease is a disease or condition that has been associated with more than one risk factor?
A. Yes.
Q. Are there specific criteria that appear in the literature for assessing the question of causal inference in the context of chronic multifactorial disease?
A. Would you repeat the question?
Q. Are there specific criteria that appear in the literature for assessing the question of causal inference in the context of chronic multifactorial disease?
A. There are things to look at, yes, which you are probably referring to specific

criteria.
Q. Yes, I am.
A. Yes.
Q. How many sets of such criteria appear in the literature?

78

A. Again, I'm not a cardiologist, or that's not my area, as you particularly were very clear.
Q. That's --
MR. GOLDBERG: Let him finish his answer.
Q. Yes.
A. As you were very clear, I'm not a physician. So I don't feel qualified to really answer that.
Q. The question of the number of sets of criteria for assessing the issue of causal inference is beyond the scope of your expertise?
A. Yes.
Q. The question of which set of criteria for causal inference are most appropriately applied under a particular circumstance is beyond the scope of your expertise?
A. Yes.
Q. The actual application of criteria for causal inference in any specific case is beyond the scope of your expertise?
A. Correct.
Q. That's true regardless of whether the

79

chronic multifactorial disease that is at issue is coronary heart disease; correct?
A. Uh-huh.
Q. You have to answer verbally.
A. Yes.
Q. That is true if the chronic multifactorial disease that is at issue is lung cancer?
A. Correct.
Q. Or any other type of cancer?
A. Uh-huh.
Q. Is that correct?
A. Uh-huh.
Q. Or any other disease or condition?
MR. GOLDBERG: Objection to the form of the question. Are you referring to multifactorial disease, since that was the line of questioning, or are you referring to any disease?
Q. Doctor, the diseases that have been associated, statistically associated with cigarette-smoking are chronic multifactorial diseases, aren't they?
A. It is a result of chronic smoking.
Q. I didn't ask you if it was a result of

80

chronic smoking. I asked you whether the diseases that had been statistically associated with cigarette-smoking are chronic multifactorial diseases. They are, aren't they?
A. Again, I don't, that's not an area of expertise of mine. So I would just as soon not go in that direction.

Q. That's fair. Whether the diseases that have been statistically associated with cigarette-smoking are chronic or multifactorial is not something that is within the scope of your expertise?
A. I think I can read the literature. That's not the kind of research that we specifically do. I just read the literature.
Q. Right. I can read the literature.
A. Uh-huh. Sure.
Q. The guy who drove me over in the cab today can read the literature.
A. Sure.
Q. The clerk at the grocery store can read the literature.
A. Sure.
Q. I'm not asking you whether you can

read the literature. I'm asking you whether it is presently within the scope of your expertise as you sit here in this deposition.
MR. GOLDBERG: Objection unless you define expertise.
A. Yeah. You know, one of the --
Q. There is no question pending, actually, right now.
MR. GOLDBERG: No question pending?
Q. Let me ask you the question that I asked before, which is whether or not the diseases that have been statistically associated with smoking are chronic or multifactorial is not something that is within the scope of your expertise?
MR. GOLDBERG: Objection, unless you define expertise.
Q. Is that true?
A. I don't conduct that kind of research. You are asking a very limited kind of question. You are trying to pin me in the corner is what you are trying to do.
Basically, what it amounts to is, I'm familiar with the literature, and that's a

secondary kind of expertise. It is not typically what we do. My expertise is diagnosing and treating people with a nicotine dependence. That's specifically what we do, very specific.
All of these other questions don't really get to my primary expertise. You're asking me about a lot of -- there's a lot of things I don't know about that you could ask, and you could continue doing this all day. But I would like to get to the expertise eventually.
Q. Right. What I'm trying to do is eliminate those things as being the subject matter --
A. Real easy to do. You go to my expertise.
Q. I just wonder, Doctor Glover, what made you think in the Steiner case that you were qualified to render an opinion in a lawsuit regarding medical causation between a risk factor and a chronic multifactorial disease.

MR. GOLDBERG: Objection. We aren't even here on the Steiner case. You are spending a lot of time asking about a case that isn't even involved in this case.

83

I also object because the issue of the ability to testify and expertise are reserved for the courts. And if you have a challenge to Doctor Glover's expertise, it is appropriate that you address that to the Court.

Q. Do you need the question read back, Doctor?

A. No.

Q. Can you answer the question, please?

A. They asked for my opinion. I have opinions about a lot of things.

Q. So it's not, it wasn't your understanding in the Steiner case that the opinions that can be rendered by an expert in a lawsuit need to be within the scope of that expert's expertise?

A. No. There is primary and there is secondary expertise. And I think I'm familiar with enough of the other literature, and that was basically what they were asking me. There is a lot of other people they could have gone to as well that had more expertise than I. But I do have some expertise. It's just not my primary expertise.

Q. Doctor, are you even permitted to render a diagnosis as to the cause of myocardial

84

infarction in the state in which you reside?

MR. GOLDBERG: Objection.

Q. Go ahead.

A. No. But that's not what I was doing there. Basically, if you look very closely, I'm just regurgitating the literature and putting it together in a format. I never diagnosed anyone having anything. I didn't say this was, you know. I just show you the risk ratios and what might have caused something and if a person smokes and so forth. I did not go in and diagnose that person or look at them or do anything medical in anyway.

Q. So you didn't render an opinion on causation?

A. Yes, I did at the end, yes.

Q. You did express an opinion as to what caused the man's demise?

A. Yes. Correct.

Q. You thought you could do that in a lawsuit even though you can't do it in a clinical setting?

MR. GOLDBERG: Objection.

Q. Right?

MR. GOLDBERG: What are you referring

85

to?

Q. Go ahead, Doctor.

A. In other words, I was asked my opinion of what I thought caused it. Then I knew, by knowing the patch literature, that the patch did not, in fact, cause the MI. If you look at the -- You don't need a medical degree to look at nicotine plasma levels and what levels they reach with a

patch or without a patch or what. You don't need a medical degree to be able to look at that. In my opinion -- and that is what they asked for, was my opinion -- at the end there I basically said that I thought it was caused by something else and not necessarily a patch. And that was by reviewing the existing literature. It is relatively simple to do.

Q. Is expressing opinion on medical causation between "genetic disposition" and myocardial infarction within the scope of your expertise?

A. No. But I'm allowed to use the word. I mean, not only physicians use those words. You just used it a moment ago.

Q. Are you allowed to conclude that a

particular individual's myocardial infarction was caused by genetic disposition in a clinical setting?

MR. GOLDBERG: Counsel, I object unless you are specific when you say "are you allowed to conclude." You need to be specific in terms of what you are referring to. Allowed by whom? Allowed by what? It is unclear from your question what you are referring to.

Q. Go ahead, Doctor.

A. Could I have the question, again?

Q. Yes, you can.

REPORTER: "Are you allowed to conclude that a particular individual's myocardial infarction was caused by genetic disposition in a clinical setting?"

A. Sure. I'm allowed to say just about, you know, in other words, I think it is up to the court to determine whether they saw me as being a primary or secondary expert. They make the determination whether that, in fact, information was right or wrong or incorrect or whatever. Anyone can make that determination.

If you look at the person's record,

you will see that there was a history of him having MIs. It doesn't take a genius to be able to figure out, when you look at the amount that he was smoking, his MI and so forth, to be able to figure out, you know, just by deductive reasoning, and that's basically what I was using there, using the existing literature to be able to come up with an opinion, because they asked for my opinion.

Q. So in a clinical setting you have no problem sitting down with a patient, with your background and your experience, and telling that patient that you, Doctor Glover, have reached the diagnosis that that patient's heart attack was caused by genetic disposition?

A. In a clinical setting I think that's a, it is different, because there I think you are working on a patient basis.

I was asked to look at this record to be able to offer my opinion.

Q. If Mr. Steiner had come into the center and you had looked at his medical records,

would you have presumed to render a medical diagnosis and communicate that medical diagnosis to Mr. Steiner?

88

A. No, I would not. We have physicians on the staff that will actually do that.
Q. In fact, it would be illegal to do that.
A. May I finish?
Q. I'm sorry. I didn't mean to interrupt.
A. We have physicians on the staff that can, in fact, do that. And the medical matters basically go to them. I was just interpreting what was there.
As far as offering a diagnosis on the individual and then offering treatment or a referral, the physician on our staff does that. I don't do that. Totally, two completely totally different things that you are talking about. You keep trying to make them one, and they are not.
Q. You mentioned the phrase "risk ratios" in response to a previous question.
A. Uh-huh.
Q. What exactly is that?
A. Can I share something? I figured you might ask that. Relative risk and risk ratios, I have underlined them for you. It is rather

89

complicated. But the bottom line in terms of risk ratio, if someone just quitting smoking on their own or, in fact, the risk ratio is 1.0, whatever. If someone uses the patch and their relative risk of quitting, in fact, is 1.6, that means that it is a 60 percent greater chance of them quitting. If the risk ratio is 2.0, it means that it is twice as great as an individual quitting.
So if I find a medication that has a higher risk ratio, that's really what I'm after, because the chances of them quitting are a little bit greater on that medication.
Q. Is there a difference between a risk ratio and a rate ratio?
A. Rate ratio? I don't know about rate ratio. I use risk ratio and odds ratio.
Q. Is there is a difference between risk ratio and rate ratio?
MR. GOLDBERG: Objection. Asked and answered.
MR. ROWLEY: He didn't answer. Just because he talks doesn't mean that he answered the question, Counsel.
A. I could ask you, say the same thing

90

about you. Basically, what you are doing is asking the same questions over and over. I would like for you to treat me a little more professionally and actually ask the question once -- I am answering it the best I can -- rather than continuously repeating it and repeating it and repeating it.
Q. Let me ask you --
A. I tell you, I use risk ratios for helping people. And I may have misunderstood you.

Did you ask me first about a rate or did you ask me about a risk?

Q. Let me ask you this, Doctor: Should I have inferred from your prior answer to my question that there is a difference between risk ratio and rate ratio, or that there is not? What should I have inferred from your prior answer?

MR. GOLDBERG: Objection. The doctor can't answer what you should infer.

A. I can tell you what I use --

What are you referring to? Let me ask that you question.

Q. I'm referring to, Doctor, whether in the peer-reviewed scientific literature and in textbooks that relate to the calculation of risk

ratios and rate ratios, whether there is a difference between the two. That is all I want to know. It is, yes, there is, no, there isn't, or I don't have the slightest idea, I don't know what you are talking about. What is your answer?

A. You mentioned relative risk and odds ratio?

Q. Rate ratio and risk ratio, is there a difference?

A. I don't know.

Q. Thank you.

What is the formula for computing a risk ratio?

A. You are talking about the risk of someone getting a disease? Let me ask you then, what do you mean by, you know, because if I just told you that I'm not quite sure, so that's why I'm being negative, and you are asking me the same type of questions, you give me your operational definition and then I can tell you. Because you have asked me the same question in a different kind of way.

Q. I thought I had asked you what a risk ratio was, and I thought you had told me.

What is a risk ratio?

A. That's a risk of someone getting a disease.

Q. Thank you.

What is the formula for a risk ratio?

A. When I see a risk ratio it's -- I don't know the formula. I couldn't really --

Q. Thank you.

A. -- give you the formula.

Q. What is the formula for a rate ratio?

A. I don't know that formula.

Q. Is there a difference between a risk ratio and a --

MR. ROWLEY: Excuse me. Did you want something?

MR. GOLDBERG: I asked him if he wanted a sheet of paper.

Do you want some paper?

THE DEPONENT: Yeah, I will take one. Thank you.

Q. Doctor, is there a difference between a rate ratio and a relative risk?

A. Yes.
Q. There is?

93

A. Uh-huh.
Q. What's the difference?
A. Rate ratio is the chances of getting the disease. A relative risk, the way that we use it in smoking-cessation, are the chances of you quitting in relationship to doing a standard or, you know, as I mentioned a while ago, on the relative risk someone has, say quitting smoking on your own is 1.0. In other words, you always, it is basically one. Then thereafter the chances of you quitting increase to 40 percent or 60 percent. So if your relative risk of quitting with a patch is 2.1, they are twice as great just doing it on your own. If it's 3.2 you are three times greater of quitting with gum or a patch or a combination. Typically, we look at, all products have what we call relative risk, odds ratios.
Q. Is there a formula for relative risk?
A. Yes.
Q. Do you know it?
A. No. It's in, I brought it with me. It is a rather complicated formula. I don't carry it around in my head.
Q. It is your testimony, Doctor, that the

94

formula for relative risk is a complicated formula?
A. Yes. I mean, I don't carry it around in my head.
Q. Whether you carry it around in your head is a different question from whether it is complicated.
A. Complicated, it might be complicated --
Q. Doctor, I'm not --
MR. GOLDBERG: Let him finish his answer.
A. Yeah, I would like to finish my answer first.
Q. I'm not done with the question.
A. I'm not done with the answer.
MR. GOLDBERG: You were asking while he was answering your question.
Q. Go ahead and talk.
A. Basically, the formula is relatively simple for a statistician, because they can spit it out very quickly. For me, I don't, it may be a little more difficult, because I don't typically carry the thousands of formulas that are needed for a lot of tests that we do. So I don't recall it.

95

But a statistician, he could draw it out in ten seconds. So it's relatively easy.
Q. So the relative-risk formula is complicated for you?
A. Uh-huh. Or not, let me say it this way, not necessarily complicated, but difficult to remember.
Q. How many variables go into computing a relative risk?
A. I just answered that a moment ago.

The --
Q. I don't recall the number that you said.
A. I just told you that I don't, the formula, I know what it is. I don't necessarily know how to compute it.
Q. That's a different question. The question that I asked you is how many variables go into computing a relative risk?
MR. GOLDBERG: The witness answered that question.
MR. ROWLEY: I didn't hear him say.
Q. Is it 5 or 10 or 20 or what is it?
MR. GOLDBERG: He didn't give you a

number answer.
A. I didn't give a number.
Q. Do you know the number?
A. No. I don't.
Q. Can you tell me whether the number of variables that go into computing a relative risk are closer to 2 or to 20?
A. I just told you I don't know. They are closer to 2 than to 20, but I . . .
Q. Are they closer to 2 than to 10?
MR. GOLDBERG: Object.
A. Basically, I have told you that I don't know. I think that that would suffice. If I don't know what it is, I may not know if it was 2 to 10 as well.
Q. You are saying that you may not know, you don't know?
A. Correct.
Q. Do you know how many variables go into computing a rate ratio?
A. No.
Q. Do you know how many variables go into computing a risk ratio?
A. No.

Q. Do you know how many variables go into computing an odds ratio?
A. No.
Q. Can you tell us the difference between an odds ratio and a relative risk?
A. Odds ratio and relative risk are pretty much the same. I use them interchangeably, even though one of them has a little more data than the other. Talking to statisticians and so forth, some people use relative risk and others will use the odds ratio. To me, I have a tendency to use, I know what they each mean, and that's all that I need to know. I don't know how to compute it.
Q. You said one of them uses a little more data. Which one uses a little more data, the odd ratio or the relative risk?
A. In other words, not all the data necessarily, when you collect data, you don't get it, if you get all the data you would, in fact, possible say compute a relative risk. And if some of the data isn't available, just by interpreting and changing some things you can come up with an odds ratio. So some people actually in the

literature report an odds ratio and others report a relative risk.

98

As for my practical purposes from my point of view, again, I am not a statistician and an epidemiologist, and I know how to read that and so forth, and to me they are pretty much, very similar. They are very similar.

Just like I use dependence and addiction interchangeably, I have a tendency to use those interchangeably as well. To me they mean something. I don't know how to calculate it.

Q. Have you ever personally calculated an odds ratio?

A. No. I have not.

Q. Have you ever personally calculated a relative risk?

A. No, I have not.

Q. Have you ever personally calculated a rate ratio?

A. No.

Q. Have you ever personally calculated a risk ratio?

A. No.

Q. Do you really know whether there is a difference between relative risk and risk ratio?

99

A. I just --

MR. GOLDBERG: Objection, asked and answered.

Q. Do you really know?

A. Yes, I do. To a certain, you know, I do. And, again, there is limited, but I can -- again, I look at what it means. And what the odds ratios and risk ratios and all of those, I know what they mean to be able to interpret the literature. Just because I don't know how to calculate it doesn't mean that I know what they mean.

Q. You told me that a risk ratio and a relative risk are different; right?

A. Uh-huh.

Q. Can you tell me whether the formula for a risk ratio and a relative risk is different?

MR. GOLDBERG: Objection, asked and answered.

A. I answered that a while ago. I think that is still, I still don't know.

Q. So they may be different concepts used for different purposes, but the formula may be identical as far as --

100

A. Could be.

Q. What is a rate ratio a ratio of?

MR. GOLDBERG: Objection, asked and answered.

MR. ROWLEY: I didn't ask him that question.

A. What was that again?

Q. What is a rate ratio a ratio of?

A. The ratio, of you actually get the disease or whatever, usually when you speak to that ratio in particular it is the chances, the relative

risk of you getting a disease or something.
Q. So a rate ratio is the same as a relative risk?
A. No.
Q. It's not the same?
A. No. Did I make it sound the same?
Q. You actually just said they were the same. Why don't you give it another try and tell us what a rate ratio is a ratio of.
MR. GOLDBERG: Objection, move to strike.
A. To be really honest, I would just, I would prefer -- Again, you are asking statistical

questions. I am sure if you asked me sociological questions or if you asked me math questions I wouldn't know those either.
So I would literally, rather than continue to disagree or argue or whatever -- I know what they mean to me. So I know how to interpret it or how to look at it. I would just, I would prefer to just move on, because I have answered those, I feel.
It has become obvious that I don't understand how they are computed and so forth.
Q. You're not an expert in rate ratios, are you?
A. No.
Q. You're not an expert in relative risk?
A. No.
Q. You are not an expert in odds ratios?
A. No.
Q. You're not an expert in risk ratios?
A. No.
Q. You are not an expert in the computation of rate ratios?
A. No.
Q. You are not an expert in the

computation of relative risk?
A. No. I'm an expert in actually treating people and helping them quit smoking. That is typically what I do.
Q. You are not an expert in the computation of odds ratios?
A. No.
Q. You are not expert in the computation of risk ratios?
A. No.
Q. Are rate ratios computed within a certain degree of confidence?
A. I just told you just a moment ago, no. And then you continue with the same line of --
Q. Doctor, I have not asked you any questions about confidence intervals.
A. Just a moment ago you were asking me relative to rate ratios.
Q. Doctor, are rate ratios computed within a certain degree of confidence?
A. I just responded to that question. All you did was add another piece. And if I don't know one piece -- you know, within a certain confidence level, basically what happens, if you

are computing something and it needs to be at the 95 percent level, it has a confidence interval within a certain level. I mean, the bottom line is I would just, I don't want to get into an area that I don't have an expertise.

Q. You're not an expert in a computing confidence intervals?

A. No. I'm not. No.

Q. You're not an expert in assessing whether a particular computed rate ratio has been computed in a scientifically-valid way?

A. No.

Q. You wouldn't know how to do that if somebody asked you to do it, would you?

A. No.

Q. You're not an expert in assessing whether a particular relative risk has been computed in a scientifically valid way?

A. No.

Q. You're not an expert in assessing whether the particular means of computing a relative risk or a rate ratio or an odds ratio or a risk ratio was appropriate under a particular circumstance, are you?

A. No. Probably not.

Q. Are you familiar with all the biases that can attend the conduct of scientific inquiries?

A. I'm not familiar with all of them, but I know bias can occur.

Q. Are you competent to assess a data set to determine what biases might attend the statistical manipulation of that data set?

A. Can you repeat the question? Am I competent to do that?

Q. Yes, sir.

A. I would say no. Usually when I want to do that I take it to our statistician who, in fact, will go over that, and he will tell me things.

Q. If we want testimony on that subject in this case, we would have to get it from somebody like your statistician; it wouldn't come from you?

A. Correct.

Q. Because that's not within the scope of your expertise?

A. Correct.

Q. Do you know the difference between

precision and validity in a scientific study?

A. I have to ask you about your, you know, I know what validity is, but I would have to see what you mean by the operational definitions of precision. I'm not quite sure what you mean.

Q. Actually, the question I'm asking you is whether you know the difference between those two things. Do you?

A. I do. But I need your operational definition. Precision is being precise, and valid is if you find, in fact, what you found was valid. So I don't know exactly what you are asking.

Q. Right. If you looked in the peer-reviewed scientific literature, is the concept, the scientific concept of precision distinguishable from the scientific concept of validity?
A. I'm just not familiar -- I don't use precision a great deal, as much as, you know. Again, those, I guess I don't know how to respond. I just thought I just did. In other words, precision is being very precise, and the other one is being valid.
MR. GOLDBERG: Counsel --

MR. ROWLEY: I need a break. I need a break. Let's take a break.
(Break.)
VIDEOGRAPHER: We are now back on the record.
BY MR. ROWLEY:
Q. Doctor, can you describe for us the scientific definition of precision without actually using the word "precise" or "precision"?
A. No.
Q. Can you describe for us the scientific definition of validity without actually using the words "validity" or "valid"?
A. It would be difficult. Probably not. I would prefer using them. It is much more, that is just playing word games, more or less. To me if something is valid it's, you know, you would almost have to use the word.
Q. Have you seen scientific definitions of the term "validity" in the peer-reviewed scientific literature?
A. The actual definition?
Q. Yeah.
A. No. It is just referred to. I mean,

I am sure, I remember my classes, but ...
Q. You say the difference is just a matter of word games. Is there a difference in the scientific definition of precision and validity? Is there a difference?
MR. GOLDBERG: Object to the form and lack of specificity.
A. Between the two, in other words, one has to be precise to be valid, more or less. But the word, I can't really tell you. I guess I'm not quite sure what you want. I'm trying, but I'm not quite sure what you want, to be really honest.
Q. What I want is to know whether you know if there is a difference between precision and validity, and, if so, what that difference is.
A. I told you --
Q. If you will just tell me whether you know if there is a difference, I will move on.
MR. GOLDBERG: Objection, asked and answered.
Q. Do you know whether there is a difference between the scientific term "precision" and the scientific term "validity"?
A. I am sure the definitions would be --

I guess I'm trying to think. I know what the words mean independently, but I guess I'm not quite sure what you mean. It seems like my word of precision didn't satisfy you. So I don't guess I know what else you want. I thought I answered that, and you keep pushing. Not knowing what you want, I guess I'm not quite sure what you want.

Q. Does that mean that there is or there is not a scientific difference between those two concepts?

MR. GOLDBERG: Objection, lack of specificity, and asked and answered.

A. Again, I thought, I thought I answered them. And if I answered them differently -- I guess I'm just not quite sure what you want, to be really honest.

Q. I want to know if there is a difference between those two scientific concepts. Is there or is there not?

A. I think we finally agreed that we didin't know or I didn't know what precision was relative your meaning. Again, I know what precision means when I try to give it an operational definition. But evidently it didn't

satisfy you. So if it, so I'm not -- Then we made the determination that I didn't know what precision was. So that being the case, I would say I don't know.

Q. Thank you.

Is bias a question of validity?

A. Sure.

Q. Is it a question of precision?

A. You would have to use that in a different, you know, give me more than just that.

Sure, it can be a question of precision. But I need to know exactly how you are using it.

Q. Are issues that arise with respect to sampling techniques issues of precision or issues of validity?

A. You have got to be very precise. In other words, you've got to be, to ultimately give valid data you need to be very precise in how you collect it.

Q. Is it also a question of validity?

A. Yes, ultimately.

Q. What is the difference between internal validity and external validity?

A. Again, you're taking me over into areas that are, that a statistician, I told you that was not my expertise. I would prefer not to go in that direction because it's not my expertise.

Q. The difference between precision, the precision and the validity of a scientific study is not within the scope of your expertise?

A. Correct.

Q. The difference between internal and external validity is not within the scope of your expertise?

A. Correct.

Q. Assessing a scientific study for

internal validity or external validity is not within the scope of your expertise?
A. That is correct.
Q. Assessing a scientific study for its precision is not within the scope of your expertise?
A. That is correct. Expertise, again, is a relative question. Obviously, you move up and down the scale. You can have secondary and primary expertise and so forth.
And, obviously, if I'm talking

statisticians, I would be much more quiet than if I were talking to someone that didn't know as much as I did about that, because there are certain levels on the continuum in terms of expertise.
So when you say "yes" or "no," I refer to no because I prefer not to continue with that line of questioning. But the bottom line is that there is a series of expertise at various levels.
Q. It would have to be a pretty wide sliding scale of expertise to include someone who doesn't know what precision is in a definition of an expert in precision?
MR. GOLDBERG: Objection. The definition of precision was given by this witness.
A. Yeah, I believe I, as I mentioned before, I think I gave you a definition to precision. You persisted. And evidently it was not what you wanted. So I thought evidently I don't know what you mean by precision.
Q. Have you attempted to assess in any way the scientific precision of any of the studies that you have cited in either of the reports that were submitted in this case?
A. Could I see the, all of them?

Q. Yes.
A. Because I don't know if I could say none of them.
Q. The September 3, 1999, report has been marked as Exhibit 2. I will hand you that.
(Deposition Exhibit No. 2 marked for identification.)
Q. You have Exhibit 1, which is the May 25, '99, report.
MR. GOLDBERG: Is there a question on the floor?
MR. ROWLEY: Yeah. Whether using the definition of precision that appears in the peer-reviewed scientific literature he has assessed the precision of any of the studies that are cited in either of his reports.
MR. GOLDBERG: Objection unless you're specific in terms of -- You used a general term definition of "peer-reviewed literature" without giving us or showing the Doctor the specific definition you're referring to.
A. Do you know which one of these are peer-reviewed?
Q. I didn't ask you which ones are

peer-reviewed.

A. You asked me the question, so I need to know which ones you think are peer-reviewed.
Q. I didn't ask you whether -- You don't need to know which of those are peer-reviewed to answer my question.
A. Why did you ask me the question?
Q. Let me rephrase the question so that you understand it.
Did you assess the scientific precision of any of the conclusions that are contained in any of the papers or studies that you cited in either report that you submitted in this case?
A. Most of these are major reports, Surgeon General's reports and so forth, that has hundreds of studies in there. And there is no conceivable way I could have looked at the numbers. Basically, I'm going by what was presented there as fact. I did not go in and look at the individual precision. In my numbering, I found only about seven of these studies that were actually specific individual studies.
Q. Which exhibit are you looking at right

now? Look at the front.
A. Two.
Q. In Exhibit No. 2, tell us which scientific studies you examined with respect to the issue of scientific precision specifically.
A. On this I think it is virtually impossible to actually do that. I would tell you none, but almost any researcher would tell you none as well. Maybe a small number, and there might even be some in the Surgeon General's report where I may have done that, because I don't quote, you know, 6,000, 8,000 studies. So I can't tell you whether I did individual ones, because there is no conceivable way that you could do that.
Plus, usually you need more than just the manuscript to do that. You usually have to back up and look at some of the data that they have collected. You can do it to a certain degree and how they have analyzed it and so forth.
But the bottom line is, I will tell you that I did not do, specifically go in and look at every one of these thousands of studies that are in there.
Q. I appreciate that information. That's

not the question I asked, but I appreciate it.
MR. GOLDBERG: Object and move to strike.
Q. Can you name for me one of the studies? Let me rephrase that.
Is there a study cited in either one of your reports, that you can name for me, that you can point to, which you assessed with respect to its scientific precision specifically?
A. Let me look at the other one as well.
Q. Well, let's do Exhibit No. 2 first, since you have already taken a while and reviewed it.
A. Okay. That one in particular, again,

most of these are compilations of a variety of studies. And I can't remember six or ten thousand studies that were quoted in each report, like Surgeon General's reports. I would venture to say that as far as going in and looking at each valid one, I just simply did not do that, look at the actual precision of each one of those studies.

Q. You keep saying you didn't do it for each one. Am I correct that you did not assess the scientific precision of any of the studies that are

cited in Exhibit No. 2?

A. Again, when there are 6,000 studies, or 10,000, or maybe even 20,000 in some of these reports, I can't remember all of them that were in there. So I can't tell you for sure whether I may have done that at a previous time. So I could, I just really couldn't tell you whether, in fact, I have done that in the past, because these are almost all major reports.

Q. Let me ask you this: What specific aspects of scientific precision are you competent to assess?

A. I think when we start looking at treatment, I think that that's where my expertise lies, and what works and what doesn't work and some of the side effects and so forth of some of the products, and actually in treatment of the nicotine-dependent patient.

Do you need this back?

Q. Thank you.

Have you ever been a smoker?

A. Yes. For a short period of time, yes.

Q. Were you addicted?

A. Yes.

Q. How short a period of time?

A. Was I addicted?

Q. Were you addicted, sir, when you smoked?

A. I guess the second question, how short a time, are you asking the span that I was addicted or how quickly I got addicted?

Q. Oh, I see. That's my fault. How long did you smoke?

A. During college.

Q. How long did you smoke, sir?

A. I couldn't give you a definite answer. It was during college, two years, something like that.

Q. What is your pack-year history of smoking?

A. It wouldn't be very much at all. I mean, I just smoked for, I mean, once you move beyond 10, 15 years, really there is no pack-history. It is your continuation of smoking over time or recently smoking to calculate the pack years. That's pretty far back. We are talking 35 years ago or so.

Q. Can you tell me your pack-year history

of smoking?

A. No. There isn't one.

Q. Your pack-year history of smoking is zero?
A. Yes.
Q. It is your testimony your pack-year history of smoking is zero even though you smoked for two years. Do I understand that correctly?
MR. GOLDBERG: Objection, asked and answered.
A. I responded to that. Again, if you know the literature you'll know that once you get beyond a certain level you are basically considered a non-smoker. In other words, if I'm smoking today and stop smoking for a short period of time of 10 or so years, you are considered an ex-smoker. Once you get beyond the 10- or 15-year period, then you're considered a non-smoker, as though you have never smoked.
So, in my opinion, I would be as in non-pack years, because none of the problems associated with smoking have, in fact, manifested during that 10-period. So I'm basically considered a non-smoker, because it takes a period of time.

So my perception is that there isn't, that I don't have a pack-year history. You might be, but I don't have one.
MR. GOLDBERG: You can only give your opinion.
Q. What is the definition of pack-year in the scientific literature?
MR. GOLDBERG: Objection. Lack of specificity. What scientific literature are you referring to?
Q. Go ahead, Doctor.
A. Pack-years are just the number of pack years that you smoke over time. In other words, if I'm smoking two packs a day for 10 years, that's a 20-pack year. If I'm smoking one pack a day for 20 years, it is 20. So I don't know if it is in the scientific literature, but that is typically, when we refer to pack-years that's what we are talking about.
Q. Approximately how many cigarettes have you smoked in your lifetime?
A. I don't have any idea. I didn't count them or anything.
Q. Is it unusual for smokers or former

smokers to have difficulty in approximating the number of cigarettes that they have smoked in their lifetimes? Is that an unusual occurrence in your field?
A. It depends on the proximity of it. We're talking, you are trying to get me to recall something that occurred 30, 35 years ago. For some people it is very important. I think if I have in the last month or last week or so and I have been smoking or if I'm smoking today, I can recall my history because there is no break. So they can usually, we can approximate pack-years. But you're talking about something that occurred, 30, 35 years ago.
Q. So in your view it is easier for a

current smoker to recall events that occurred 35 years ago because he is a current smoker than it is for a former smoker to recall events 35 years ago because he is a former smoker. Is that what you're saying?

A. I don't know. I have no idea what you just asked. The question is terribly confusing.

But if I have been smoking for 35 consecutive years, it would be real easy for me to

remember, as opposed that if I had a 35-year break and then you try to get me to remember how many I smoked. I think that's a little, actually, it's kind of ridiculous.

If someone has been smoking for 35 you would remember it, because if you started 35 years ago rather light, and for the past 10 or 15 years they will know exactly how much they are smoking because they are spending money on it all the time.

Q. How many cigarettes a day did you smoke when you smoked?

A. Probably, I'm just guessing, probably 10, somewhere in that vicinity.

Q. Ten per day?

A. Yeah. Somewhere in that vicinity.

Q. Ten per day for approximately how long?

A. I would say a year to two, somewhere in that vicinity. About 10 a day. I'm trying to remember. Again, this was in college.

Q. Has any physician ever told you that you are at increased risk today for smoking-associated disease because of your smoking history?

A. No. 35 years ago.

Q. That question relates to relative risk, obviously?

A. Uh-huh.

Q. Is that right?

A. What was the question again about?

Q. The question of whether you are at increased risk of disease because of your smoking history is a question that relates to the scientific concept of relative risk, isn't it?

A. Uh-huh.

Q. You have to answer verbally.

A. Yes. I'm sorry.

Q. And that's one of the things that we talked about before --

A. Yes.

Q. -- that is beyond the scope of your expertise.

A. Uh-huh.

Q. Is that correct?

A. Yes. When you start getting into definitions and so forth. But I understand the basic concept of what you are getting at.

Q. Is it within your scope, is it within the scope of your expertise to assess whether you,

sitting here today, are at increased risk for smoking-associated disease because of your particular smoking history? Is that within the

scope of your expertise?
A. Of my own?
Q. Yes, sir.
A. I have opinions about myself.
Q. We all may have opinions. But are you an expert on that specific subject?
MR. GOLDBERG: Objection unless you define "expert opinion."
A. I don't think anyone should diagnose themselves to begin with, but that was 35 years ago, somewhere in that vicinity.
Q. Is the question of whether someone today is at increased risk for disease because of a smoking history or smoking that occurred 40 years ago something that is within the scope of your expertise?
A. I guess I'm not, in other words, if they were smoking 40 years ago continuous?
Q. No.
A. No. Smoked 40 years ago and then stopped?

Q. Yes.
A. I think all the literature, even though I'm not an expert and haven't done that in the epidemiological studies, but typically once you get beyond 10 or 15 years, if you haven't accrued or actually any of the problems may have manifested, you are basically considered a nonsmoker. But it takes a period of time.
Q. Did you smoke more than 100 cigarettes?
A. I am sure I did, yes. I mean, I am sure if I was smoking 10 a day for one, two years. I can't remember.
Q. Why did you start smoking?
A. I think it was an attractive thing to do. Others were doing it as well.
Q. One of the reasons you started smoking was peer influence?
A. Yes. I guess you could probably say that. That was one of the reasons.
Q. Were some of your friends smoking?
A. Yes.
Q. Was that one of the reasons that you started smoking?

A. Yes, possibly. Yeah. I can't remember exactly why I started, but I'm sure that may have contributed, just like many things may have contributed.
Q. Is there anything else that influenced your decision to start smoking?
A. I think there may be a couple of other things.
Q. What are they?
A. One is probably advertising. I think that is at a time when advertising was everywhere and it was very attractive to see. You'd look at magazines or whatever, and it looked very attractive.
Probably the third thing, in addition to peer pressure and advertising, is -- it may be

difficult to believe, but the perception of myself is that I'm a very shy person. And even though I have matured and a little bit that's changed, back then I was a very shy type of a person, and I think I had poor social skills. And I think cigarettes probably helped me. So it probably helped me with poor social skills. And advertising as well as peer pressure.

126

Q. What year did you start smoking, approximately?
A. '65, something like that, '63. That's something I can't remember. '63, possibly, something like that. That's pretty tough to go back.
Q. Do you recall whether it was before or after the Surgeon General's report, the '64 report?
A. Yeah. No, I really don't remember, to be honest.
Q. How old were you?
A. Probably 18, something like that, 19.
Q. How old were you when you started college?
A. 18.
Q. Did either of your parents smoke?
A. Yes.
Q. Both?
A. Yes. They smoked for a while.
Q. Did they quit?
A. My dad died of a heart attack, and my, I believe, I believe my mother is still smoking. I haven't seen her in a while. I believe she still smokes. She has tried to quit and simply says she

127

can't.
Q. Did you smoke before college?
A. I may have. I'm just trying to recall back then. I may have snuck a cigarette or two in, or something, at a party or something on a weekend. But I just simply did not, I didn't smoke. I was very much into sports then.
Q. Was smoking allowed at your school when you were a kid?
A. Everyone went -- I don't think it was allowed. Everyone went out in the parking lot and smoked. I didn't go out there because I didn't want to be seen. If I did smoke it may have been four or five of us hanging out on the weekend or something. Like I said, I can assure you it was probably less than five cigarettes. I can just recall actually just one instance, but there may have been others. I mean, you're talking a long time ago.
Q. You said you didn't go out there because you didn't want to be seen. What did you mean by that?
A. Because I was an athlete. And I'm sure I probably would have been kicked off the team

128

or something, or there would have been some repercussion if word would have gotten back to the coaches that I was seen smoking out in the parking lot.

Q. I guess, if you would have been kicked off the team I guess there was a rule against athletes smoking?
A. If I remember correctly, there probably was. I can't remember for sure, but I think that there was.
Q. Did you ever smoke in front of your parents when you were growing up?
A. Oh, no.
Q. Why not?
A. I just, I was actually a pretty, I rarely did anything. I just went to school and played sports and came home. I just didn't, I was not one to go out and do things or smoke or get in any of kind of trouble or whatever in high school.
Q. You are saying that you were a pretty good kid and didn't do things that your parents didn't want you to do, generally speaking?
A. Yes. That's generally.
Q. Including smoking?

A. Yes. I think they discouraged it among kids.
Q. Do you have any siblings?
A. Uh-huh.
Q. Did they smoke when you were growing up?
A. Between me and my brother -- I'm the oldest of eight, and one actually died at birth, so there was nine of us. But between me and my next brother there is four and a half years. So I basically was gone off to school in college, and I never, I don't know whether they smoked at home. Now they are adults and some of them smoke. But at the time it was, it just didn't happen.
Q. Why was it that your parents didn't want you to smoke?
A. I think they, I don't know. They just didn't. I don't remember. And maybe there wasn't even something that they didn't want. It was just one of those things that, like I would never have taken a beer, even if they would have offered me a beer, in front of my parents. It was probably just out of respect or something. I don't think they ever said, Don't smoke, that I can remember,

because I just never did, or would take a beer because there was a, or drink around the house, I would just never do that in front of my parents. That was probably my choice to not do that in front of them.
Q. Why did you make that choice?
A. Out of respect for my parents.
Q. What do you mean?
A. I just didn't want them to think less of me, because I was one of those that liked to, I did things that my parents wanted. I tried, basically, as I said, I was a good kid and didn't get in trouble. They never specifically mentioned it, but it just didn't seem like the right thing to do. Like I never talked back or said anything like that. I just wasn't that type of person.
Q. It was your impression at the time

that smoking was one of those things that would have gotten you into trouble?
A. Yeah, that's probably right. Because I guess the way it was perceived at school, I just carried that home, I guess, or something. Plus being very much into sports, I did not participate in cigarettes, really.

131

Q. What kind of chemical is nicotine?
A. I'm not a pharmacologist. I would prefer not to, that's not my primary expertise.
Q. You are not an expert in what kind of chemical nicotine is; right?
A. Uh-huh.
Q. Is that correct?
A. Yes.
Q. In fact, you don't know what kind of chemical nicotine is?
A. You know, you need to, what I would like to have, maybe, is your operational definition. "What kind of chemical," that is like tell me the history of the world. That is such a broad term. I don't know what you mean, what kind of chemical.
Q. Doctor, if I told you, if I gave you that you that information I would be answering the question for you. Is there more than --
MR. GOLDBERG: I object and move to strike that comment.
Q. Is there more than one type of chemical, Doctor?
A. Yes.

132

Q. Is nicotine a particular type of chemical?
A. Again, the particular type of chemical, do you want to know that it's, I mean, there are so many directions. As far as you answering my question, I think that is very unfair, because it is like me asking you, Tell me about life. And you say, Well, what part of life? What do you mean?
Is it a depressant? Is it a stimulant? I mean, what -- you're not giving, there's so many directions that you can go with that, and that's unfair for you to say that. I'll let you know if you're drifting in an area where I don't have expertise. But your question is very broad.
Q. Is nicotine pharmacologically active?
A. Yes.
Q. In what way?
A. It's perceived by the literature, when it is given in terms of smoking, it is perceived as a stimulant. It is one of those unusual drugs that has a double-edged sword that in larger doses can actually be seen as a depressant as well.

133

Q. Is every stimulant pharmacologically active?
A. Yes. I mean, if it is a stimulant it is a drug, you know, it is active. It actually can, it can create, yeah.

Q. Is every depressant pharmacologically active?
A. Yeah.
Q. What is the pathophysiologic mechanism by which nicotine acts as a stimulant?
A. It stimulates the central nervous system initially when you first begin to smoke. I can tell you that. I can't go into what happens physiologically at certain levels, but I can basically tell you in general. In other words, my expertise can just go to a certain level then it has to stop. We hook people up to equipment and can see by smoking cigarettes that it, in fact, causes the heartbeat to pick up by 21 beats a minute or more.
Q. I asked you about the pathophysiologic mechanism. Do you know what that is?
A. Yes. And I gave you an answer. Did you hear my answer?

Q. What does the phrase "pathiophysiologic mechanism" mean?
A. I told you that's not my expertise. I'm not a pharmacist, as you made that very clear earlier.
Q. You are not, because you're not a pharmacologist, you are not an expert in the pathophysiologic mechanisms by which various substances may or may not affect the central nervous system; is that fair?
A. That's fairly accurate, yes.
Q. What is catecholamine?
A. I just told you that that's a, I would just prefer not to respond to that because that's not my area of expertise. What I'm saying, you just made it very clear that I'm not a pharmacologist, and you are pulling up questions again that relate to that. So I don't really see your reasoning for that, because we already established one thing and then you come back and ask me again.
Q. You're not an expert in what catecholamine is?
A. No. I'm not.

Q. You're not an expert in the biologic effects of catecholamine induction; right?
A. No. I'm not.
Q. You're not an expert in what is or is not a catecholamine inducer?
MR. GOLDBERG: Objection, asked and Answered.
MR. ROWLEY: Counsel, that's a completely different question.
Q. You're not an expert in what is or is not a catecholamine inducer?
A. No. Just like I'm not an expert on building construction or whatever.
I made it very clear, all those questions you're asking basically fall under the same category. You could ask a million questions like that, and you'll get the same response. I don't understand really why you continue that line

of questioning, because I have already established that I'm not a pharmacologist.
Q. Do you know what a pyridine alkaloid is?
A. I'm not a pharmacologist.
Q. If I ask you whether you are a

136

pharmacologist, will you then tell me whether you know what a pyridine alkaloid is?
A. I already told you. I'm not a pharmacologist. That's beyond my scope of expertise.
Q. I can infer from that that you don't know what a pyridine alkaloid is?
A. That's beyond my scope of expertise.
Q. You're not an expert in the differences between various types of alkaloids; correct?
A. Correct.
Q. You don't know how pyridine alkaloids differ from other types of alkaloids; correct?
A. Not being a pharmacologist and never took those classes, my expertise is actually treating the nicotine-dependent patient, which most cigarette-smokers are.
Q. Do you know what substance, or what substances are catecholamine inducers?
A. Again, that falls under the category of pharmacologists and pyscho, that group, the psychopharmacologists, and that's not my area of expertise.

137

Q. Do you know what sympathomimetic amines are?
A. Like I told you, I'm not a pharmacologist. That's not my area of expertise.
Q. Can you name for me any of those types of amines?
A. I'm not a pharmacologist, so I still don't know the ...
Q. In what broad group of amines does the substance called Dopamine fall?
A. Again, as I told you, I'm not a pharmacologist. I would prefer not to go in that direction because that's outside my area of expertise.
Q. You're not an expert in the subject of Dopamine?
A. No.
Q. Or epinephrine?
A. No.
Q. Or the effects of Dopamine or epinephrine, you're not an expert in the effects.
MR. GOLDBERG: objection.
A. No. I'm not an expert on the effects.
Most of these questions I have an

138

idea, because when you work in an area they are slightly overlapped. But that's not my area of expertise. That's not where ...
Q. You don't know, for example, the difference between Dopamine and epinephrine?
A. Again, that's a pharmacologist's

response. I would just -- That's beyond my scope of expertise.
Q. Can you explain for us the pathophysiologic mechanism by which Dopamine has its effects on the brain?
A. Again, that's beyond my scope of expertise.
Q. Do you know what catechol is?
A. Again, that's not, beyond my scope of expertise.
Q. I'm sorry, it is or is not?
A. It is beyond.
Q. Are catecholamines induced by nicotine?
A. Again, that's beyond my scope of expertise. My expertise, I need to make it clear again, is actually treating the pharmacological adjuncts in terms of helping people quit smoking.

That's where I tend to know a little bit more.
You could probably move this a little, along quicker. I'm obviously not a pharmacologist, and you continue to ask pharmacology-type questions.
Q. What is the no-effect level of nicotine exposure?
A. What is your question?
Q. What is the no-effect level of nicotine exposure?
A. Again, that's beyond my scope of expertise.
Q. Are the effects of nicotine characterized more accurately as single-phase or biphasic?
A. Again, that is beyond my scope of expertise.
Q. Is the subject of the absorption and fate of nicotine beyond the scope of your expertise?
A. Yes.
Q. Is the importance, whether pharmacologic importance or any other type of importance, of ionization in the context of

nicotine exposure beyond the scope of your expertise?
A. Yes.
Q. Does ionization affect bioavailability?
A. Again, that is beyond my scope of expertise.
Q. What's the pharmacologic effect of heating nicotine?
A. Again, that is beyond my scope of expertise.
Q. Is nicotine, as it appears in tobacco smoke, primarily in its gas phase or its particle phase?
A. Again, that is beyond my scope of expertise.
Q. Does the question of whether nicotine is a catecholamine inducer relate in any way to the issue of whether nicotine is addictive?

A. Again, that is beyond my scope of expertise.
Q. Does the question of what kind of chemical it is relate in any way to the issue of whether nicotene is addictive?

141

A. Would you repeat that question again?
Q. Does the question of what type of chemical nicotine is relate in any way to the issue of whether nicotine is addictive?
A. That is beyond my scope of expertise.
Q. Does the question of how and in what way nicotine is pharmacologically active relate in any way to the issue of whether nicotine is addictive?
A. I think that is beyond my scope of expertise.
Q. Does the question of ionization or non-ionization of nicotine relate in any way to the question of whether nicotine is addictive?
A. That is also continued with the same pattern of pharmacologic-type questions, and that is beyond my scope of expertise.
Q. Does the question of whether nicotine is a catecholamine inducer relate in any way to the question of whether nicotine causes dependence?
A. Beyond my scope of expertise.
Q. Does the question of whether nicotine ionizes or does not ionize in the process of physiologic uptake relate in any way to the issue

142

of whether nicotine can cause dependence?
A. That's beyond my scope of expertise.
Q. Does the question of Dopamine production relate in any way to the issues of whether nicotine is addictive or can cause dependence?
A. No. Again, it is all that line of questioning. I have secondary expertise on this because I know a lot more than the average person. But as far as being a primary expert, I would not see myself as a primary expert in these areas. And I would say that I do not have the expertise really to respond to that.
Q. You don't know the answer to that; is that fair?
A. I don't have the expertise that goes along with that.
Q. Do you know the typical range of pH of cigarette smoke?
A. I don't have the expertise for that.
Q. Does that question relate to the issue of whether smoking can cause dependence or is addictive?
A. I don't have expertise for that.

143

Q. Do the central issues that relate to absorption and fate of nicotine have an effect on the judgment as to whether smoking or nicotine is aadictive or can cause dependence?
A. Again, that is beyond my scope of expertise.
Q. Once nicotine is inhaled, what happens

to it?
A. It goes in your lungs.
Q. What pharmacologically-significant events occur between inhalation and presence of nicotine in the lungs?
A. I think that's beyond my scope of expertise.
Q. What events that relate to dependence or addiction occur during that time period, if any?
A. Again, that is beyond my scope of expertise. Again, I work with the treatment. As far as, we actually try to help people that have already been addicted or are trying to quit smoking. Those are the ones that we make an effort to assist.
As far as the mechanism, it's like getting in a vehicle. I don't know how the pistons

work, but I know how to turn on the ignition.
You're asking some real specific types of questions.
Q. What you're saying is if you want to know how an engine works, you have to ask a mechanic, not just a lay person who drives a car; right?
A. Yeah, even though some people could do both, or whatever. To me, I concentrate more on the treatment aspects of helping smokers.
Q. Is nicotine absorbed at any site in any biologically-significant way in a smoker other than the lungs?
A. Again, that is beyond my scope of expertise.
Q. Is there an association between the prevalence or incidence of dependence and dose of nicotine?
A. I think that is beyond my scope of expertise.
Q. Is there an association between the prevalence or incidence of addiction and duration of smoking habit?
A. I think it is commonly held that

typically -- and I'm generalizing here -- the more you smoke and the greater the intensity in terms of topography, that there is a relationship of that to addiction, the more you can become addicted.
Q. I think you told me before that you use addiction and dependence --
A. -- pretty much interchangeably, yes. I won't specify that, DSM-IV says dependence, and that's the professional definition that's used. To me it's like saying cancer is a malignant neoplasm. I use them interchangeably. Some people distinguish. I don't.
Q. So dependence, in your mind, is the professional or scientific term, and addiction is kind of a loose lay term?
A. Yeah. Say equivalent to cancer. It's what the public uses. And I know cancer, you walk up to someone on the street and say malignant neoplasms, they won't know what you're talking about. If you mention cancer, they are familiar.

Q. So the criteria for assessing whether a substance can be addictive, in your mind, is the same criteria that should be used in assessing whether a substance can cause dependence, because

146

you equate those two things. Is that fair?
A. Yes. For me the definition is, I mean, they are pretty much, they are the same, yes. I have a tendency to use addiction because that's the patients, the people that come in, they relate to that. Dependence, they don't quite understand that. So we use the lay term.
Q. My question is, the criteria that are employed in assessing whether a substance can be addictive, in your mind, are the same criteria that are employed --
A. I don't know about other substances.
Q. You need to wait until I get done asking the question.
Let me ask you this: Are the criteria that are used to assess whether a patient is addicted to nicotine the same criteria that are used to assess whether a patient is dependent upon nicotine?
A. Again, I don't know about others. As I mentioned, I use the word interchangeably. So for us, yes, we use the word, at our Center, dependence. Even though if you talk to, I'm sure, a pharmacologist, they would be very specific and

147

so forth. Where, again, for us the lay public, the people out there are the ones that understand the word addiction as opposed to dependence.
Q. If you were going to assess in a particular patient whether that patient was addicted to nicotine, you would use the same criteria that you would in assessing whether that person is dependent upon nicotine?
A. Yes.
Q. Very good.
The criteria that you use to assess nicotine dependence is the DSM-IV criteria?
A. That's one of many things, yes.
Q. Are there any other formal sets of scientific criteria that are used to assess nicotine dependence in an individual patient, other than DSM-IV?
A. Well, typically, what we do, is DSM-IV is just one of many tools, because an assumption is always made if a person smokes 30 cigarettes and someone smokes 20 that the one smoking 30 is more dependent, and that's typically what is used. But the topography, in how a person smokes, whether they inhale it or hold it or whatever.

148

So what happens is we look at not only the number of cigarettes, because that's kind of a crude indicator, we look at also things like the FTND, Fagerstrom Nicotine Dependence, and look at the FTQ as well. The FTND is a revised version, and we take a look at that and see where they score.
So we just give a series of tests to

be able to see if a person is addicted.
And we find the most predictive question on the FTND, basically, is how quickly a person lights up in the morning. If they wake up and light up very quickly, within 30 minutes or an hour or two, that begins to tell us that they are a little more addicted than someone who can wait until noon.
So even though we use a series of things to actually try to assess that person, that is how we determine if, in fact, that person is somewhat addicted, going through our treatment facility.
MR. GOLDBERG: Off the record, or soon off the record.
MR. ROWLEY: No. Right now is fine.

149

(Off the record.)
VIDEOGRAPHER: We are now back on the record.
BY MR. ROWLEY:
Q. Doctor, what is the scientific definition of a nicotine receptor?
A. That's not my area of expertise.
Q. The functioning of nicotine receptors is not within the scope of your expertise?
A. What's the question?
Q. The functioning of nicotine receptors is not within the scope of your expertise?
A. Correct.
Q. Their importance in assessing whether or not smoking or nicotine can be or is addictive is not within the scope of your expertise?
A. Yeah, not my primary. We have to understand, when I am working in treatment in helping people quit smoking, we have to have a general understanding of a lot of things. But it is not my primary area of expertise.
Q. Well, now you are fudging a little bit. Why don't you give us the scientific definition of nicotine.

150

A. No. I told you that it was not my primary area of expertise.
Q. That doesn't answer the question.
Do you know the scientific definition of nicotine receptors?
MR. GOLDBERG: Object to the words "the scientific." It is vague. If you ask the witness what his definition is.
Q. Do you know the scientific definition of nicotine receptors?
A. That's beyond my scope of expertise.
Q. Does that mean you don't know?
A. That's beyond my scope of expertise. I have primary and secondary, and I would rather concentrate on my primary area of expertise.
Q. Do you know the answer to the question?
A. That's not my primary area of expertise.
Q. Do you know the scientific definition of nicotine receptors?

A. It's beyond my area of primary expertise.
Q. Do you know the scientific definition

151

of nicotine receptors?
A. No. The same thing. I will tell you the same thing.
Q. Do you know the scientific definition of nicotine receptors?
A. It's beyond my area of expertise.
MR. GOLDBERG: Asked and answered.
Q. Do you know the scientific definition of nicotine receptors?
A. I don't know what else you want me to say.
MR. GOLDBERG: It is asked and answered. Pursue it in court.
Q. May I infer from your answer that you do not know the definition?
MR. GOLDBERG: Objection.
A. It is beyond my area of expertise.
Q. Is it within your capacity to say "yes" or "no" to that question?
A. It's beyond my area of expertise.
Q. Are you refusing to say "yes" or "no" to that question?
A. No, I'm not. It is beyond my primary area of expertise. I would rather concentrate on

152

my primary.
Q. What is the scientific definition of nicotine receptor?
A. It's beyond my primary area of expertise.
Q. Doctor, whether the definition of nicotine receptor is within or beyond your area of expertise, whether or not that is true, can you give me the scientific definition of nicotine receptor?
A. I would prefer not to, because it is beyond my area of expertise.
Q. Whether it is beyond your area of expertise or not, do you know it?
A. It is beyond my area of expertise.
MR. GOLDBERG: I object to the form of the question. As I indicated before, you keep using the term "the scientific definition," and it is vague what you are referring to.
Q. Is nicotine receptor a lay term or a scientific term?
A. It's a scientific term.
Q. Are there other scientific terms for the entity known as a nicotine receptor?

153

A. I don't know if there are other terms. I am sure there might be or whatever, but it's beyond my area of expertise.
Q. If there are any, can you name them?
A. It's beyond my area of expertise. I have only heard nicotine receptors.
MR. ROWLEY: Let's go off.
(Off the record.)
VIDEOGRAPHER: We are now back on the

record.
BY MR. ROWLEY:
Q. Where are nicotine receptors located in the human body, if anywhere?
A. That's beyond my scope of expertise.
Q. What other kinds of receptors are there in the human body?
A. I am sure there are others. That's not my area of expertise. I deal with the diagnosis with nicotine, basically, try to, in the treatment of smokers.
I don't get into the biology or the pharmacology or any of those other aspects. I have a general understanding, but not an expertise, primary expertise.

154

Q. When you say that a particular question is beyond the scope of your expertise, may I assume that you do not know the answer to the question?
A. No, you cannot assume that.
MR. GOLDBERG: You may assume --
MR. ROWLEY: No. I'm not asking a question. I am satisfied with his answer.
Q. Do you know or do you not know what other types of receptors there are in the body?
A. That's beyond my area of expertise.
Q. Given your answer to my last question, that response does not answer the question that I asked. Are you refusing to answer the question that I asked you?
A. No. I have limited expertise in some of these areas, and I would prefer not to go there. I have an understanding, a little bit, of what those are; but I would prefer not to go there, because that's not what, my area of expertise.
Q. If --
A. It is more secondary. And I would appreciate if you didn't interrupt me as well.
Q. I didn't intend to.

155

A. But it's an area, and I have a general understanding, but not sufficiently to qualify myself as a, word, expert. I just, I would rather not respond to those because those are secondary or even lesser. My primary interest is totally different. My area of expertise is actually in treating nicotine-dependent patients.
Q. Since you would prefer not to respond, you're refusing to answer; is that correct?
A. No. That's not correct. It is just that --
Q. Oh, okay. Go ahead.
A. May I finish?
Q. You bet.
A. No. It is just that I would prefer not to go there, because I am not as comfortable there with some of those responses because it is not my primary area of expertise. I have secondary areas, but it's not my primary.
Q. Doctor, will you also refuse to tell us whether you know how physiologically nicotine receptors differ from other receptors? Will you

also refuse to tell us that?
A. I'm not refusing to tell you anything.

156

I just, again, it is beyond my area of expertise. And I have a good general understanding. That doesn't necessarily mean that I'm an expert.
I am sure you cook at home, and if you do cook that doesn't make you a chef. You have a general understanding, but it's just that, doesn't, you know, so I don't particularly want to delve into those areas. They're not areas of expertise of mine.
Q. What is your --
MR. GOLDBERG: For the record, Doctor Glover is not being called to give testimony in those areas, and I don't know why we are spending so much time on those areas.
MR. ROWLEY: Oh, okay. Well, let me, let's clarify that.
Q. Doctor Glover, you're not going to give any opinions in this case that relate to the question of whether nicotine is addictive; is that correct?
A. Would you repeat that again?
Q. You are not going to give any opinions in this case that relate to the question of whether nicotine is addictive; is that correct?

157

A. Using the words, but I'm sure I will probably make opinions. But, again, it is not a matter of black and white, yes or no, because addiction to nicotine is this large a topic, and I know a smaller topic. So questions I feel comfortable responding to, I will respond to those. But the ones that I feel that are beyond my scope of expertise, I will prefer or choose not to, because I have to have a general understanding of nicotine and addiction to work in the treatment area.
Q. Are you going to express an opinion as to whether nicotine satisfies any set of criteria for addiction?
A. Yeah. I thought that was answered pretty much in the previous question. Where I feel comfortable I will, and where I don't I won't.
Q. Are you going to render that opinion or not?
MR. GOLDBERG: What was the exact question?
A. What was the question now?
MR. ROWLEY: Could you read it back, please?

158

REPORTER: "Are you going to express an opinion as to whether nicotine satisfies any set of criteria for addiction?"
Q. Could you answer that question?
A. Yes. Probably not.
Q. You cannot tell me for certain whether you will render such an opinion; is that correct?
A. That is correct, because I don't know what question you are going to ask me.
Q. I am asking you that question. That's

the question.
A. That one is beyond, I feel, my scope of expertise.
Q. Very good.
How physiologically do nicotine receptors differ from other receptors?
A. I think that is beyond my scope of expertise. I'm not a psychopharmacologist.
Q. Do you know how physiologically nicotine receptors differ from other receptors?
A. I'm not a psychopharmacologist, and that's not an area of expertise of mine.
Q. If I ask you whether that subject is within the scope of your expertise, will you then

tell me whether you know if it differs physiologically, if nicotine receptors differ physiologically from other receptors?
A. Again, I'm not a psychopharmacologist, so that's not an area of expertise. So I don't particularly want to go there. There's a lot of things I don't know about, and that seems to be where you are spending your time.
Q. Doctor, tell me this: Is there any question that I can ask you, is there any way that I could phrase the question such that you would be willing to tell us whether or not you know if there is a difference physiologically between nicotine receptors and other receptors? Is there any question I can ask you in response to which you would actually answer that?
MR. GOLDBERG: Object to the form of the question.
A. Probably not.
Q. Of what significance are nicotine receptors in assessing whether nicotine is addictive or causes dependence?
A. I think some of the literature from Balfour in Scotland will show that the more you

smoke the greater density of nicotine receptors sites you will develop in the brain. The more you smoke and the longer you smoke the greater density, which usually, obviously, evolves. It's kind of an indicator that a person may, in fact, be a little more addicted. So that's my understanding of that portion of the literature.
Beyond that, I think I would have no understanding of it. But that's my understanding in terms of how Balfour explained it to me, and I have read his literature.
Q. What does that mean, that the receptors become more physiologically dense?
A. Yes.
Q. That's what it means? Do they get bigger?
A. They develop a greater density, more of them. I couldn't tell you if they become bigger or not. I do know there is a greater density.
Q. That means their distribution is more dense or the ones that exist become more dense?
A. The distribution develops more, is my understanding of that.

Q. Scientifically, Doctor, how is it that

that hypothesis came about?
A. I can't really tell you that. I didn't develop it.
Q. Is it a hypothesis?
A. In talking to Balfour, and he has talked about nicotine receptor sites, he has actually, some develop greater density and so forth, and it's usually associated with a level of nicotine consumption.
Q. How was that demonstrated?
A. He did post-mortem, scan parts of the brain post-mortem. In other words, he extracted and looked at the brain of people that have, in fact, smoked, cigars and smoking and so forth.
Q. What was the scientific methodology that he employed?
A. I don't, I didn't -- I just know what I have read in the literature. I don't know the scientific methodology. I don't work in that area.
Q. The studies that relate to the density of nicotine receptors are not within the scope of your expertise?
A. No. Not all of it. I have a little, as I said, a general understanding, as everyone

would probably.
Q. What hypothesis was tested in the studies that you are referencing?
A. Again, these are my conversations with him and in reading some of his articles, and I don't remember the actual hypothesis. But he was looking for nicotine receptor sites in the brain.
MR. GOLDBERG: Do you have the article with you so that the doctor may refer to it, please?
MR. ROWLEY: It is the doctor who brought the article up. I didn't bring the article up. Do you think I am clairvoyant?
Q. Did you assess the scientific validity of whatever studies you are talking about?
MR. GOLDBERG: Object to the form of the question, ambiguous and unclear what you mean.
Q. Did you assess the scientific validity of whatever study you were talking about?
A. No. I did not. These were in primarily conversations that I have had with him at various meetings.
Q. Have you actually read the studies that you are talking about?

A. Yes.
Q. The studies didn't describe their methodology?
A. Sure. But you are talking about thousands of articles that I read. I can't remember every one and every detail.
Q. Of precisely what pharmacologic significance is an increase in the density of nicotine receptors with respect to the issue of whether nicotine is addictive?
A. I think the general overall

understanding, or at least what's mentioned, is the greater density of nicotine receptor sites that you develop to accomodate more nicotine the more likely you are to become more heavily addicted. That's the basic theory.

Q. Is that a hypothesis?

A. No. I think for some people it might, but I think that is pretty much people, in fact, see that, view that as fact.

Q. You called it a theory. What is that?

A. Theory, basically a theory is they build up some ideas or concepts and then test them to, in fact, see if they are true.

164

Q. What criteria were used in assessing, for the subjects on which he performed port-mortem examination, what criteria were used in assessing the strength of those subjects an addiction or dependence?

A. Again --

MR. GOLDBERG: Objection, asked and answered, and unclear what you mean by "assess."

Q. Go ahead. Go ahead.

A. Would you repeat the question?

Q. Yeah. What criteria were used in assessing the strength of the addiction or dependence on the part of the cadavers who were examined post-mortem?

A. Again, those articles, I may read them, as I read thousands of articles. I can't remember all the specifics and all the detail. I just try to remember the concepts. I don't -- That's not where I spend a lot of my time, because, again, this is outside my area of expertise. And I just draw some general concepts and ideas. That's not where I would spend most of my time, reading that type of literature.

Q. What criteria were used in the 1988

165

Surgeon General's report for assessing the question of whether smoking or nicotine can be addictive?

A. I don't remember all the specifics. Even though I have it and have thumbed through it 50 times, I couldn't even begin, a hundred times or more, I couldn't begin to tell you. That document is about four inches thick, probably has, I think it has 667 pages, somewhere in that vicinity. There is no way that I could begin to recall all of that information.

Q. It has 600 pages, but the specific criteria used to assess the issue appear on one page.

A. Everything appears on one page. It is just remembering which page.

Q. I'm not asking you which page.

Can you tell me anything about the criteria for addiction that were used in the 1988 Surgeon General's report in comparison to prior criteria that may have been used?

MR. GOLDBERG: Objection, vague.

Q. How were those criteria different from prior criteria?

A. I couldn't tell you that. That's not

what I typically would do.
Q. That's beyond the scope of your expertise?
A. Yes.
Q. The development of criteria for assessing the issue of addiction is beyond the scope of your expertise?
A. For assessing addiction?
Q. Yes.
A. Not within the patients that come into the office. I mean, that's one of the things where we can, in fact, diagnose that.
I'm not talking about doing nicotine studies and nicotine research and working at those levels that you are talking about. I'm talking when a patient comes in that we could sit down, through a battery of tests, that we can actually sit down and determine whether that person is addicted or not. And there's some very simple ways.
You don't need to understand the levels of Dopamine and all at that level. You don't have work at the cellular level to actually treat people. You have an understanding of it, but

you simply don't need that information.
Q. You have misunderstood my question. I move to strike the answer.
The question that I asked you relates to the historical development of criteria for assessing whether a substance can be addictive.
That's not within the scope of your expertise, is it?
A. I know it not a matter of expertise if I would have read it, and I'm sure I have. I just don't remember specifically, because there is nothing specifically. I can say it is in the literature. I could have read it. But I just simply can't remember it. I know what it is, basically, today and understand how to treat that nicotine-dependent patient.
Again, we use a battery of tests to look at how addicted that person is or to determine if they are. Then we try to use appropriate treatment.
As far as definitions and what they were, I have no idea. But I know addiction when I see it.
MR. GOLDBERG: Counsel --

MR. ROWLEY: Move to strike that a non-responsive.
MR. GOLDBERG: Counsel --
MR. ROWLEY: There is no question pending.
MR. GOLDBERG: Counsel, the discovery that is authorized is discovery related to class certification issues. You are delving far afield from that.
MR. ROWLEY: Counsel, you have given us two reports, one of which you didn't number the pages. I don't know whether you had a reason for

not doing that. They are both thick reports, and they cover a wide variety of issues.

And I intend to ask about the subjects in those reports because I don't want you claiming that we missed an opportunity to ask about those subjects.

If you wish to narrow the scope of this deposition, you should have given us narrow reports.

MR. GOLDBERG: The deposition is to deal with issues relating to class certification, as you know from the Court's order.

You can make judgments about what you want to cover, but I point out to you that that is what is contemplated by the Court's order.

BY MR. ROWLEY:

Q. Doctor, as you sit here, are you familiar with the historical development of criteria for assessing whether a substance can be addictive?

A. I am sort of familiar, but not really. I mean, I have read it and so forth. But, again, that really doesn't relate to what I need it for. Understanding the history of something doesn't necessarily help me in treating individuals.

Q. Since you don't need it in your day-to-day work, it is not something you are particularly familiar with?

A. No. The history is not something that we use when we are treating the people.

Q. You are not an expert in history?

A. No, not particularly. Other than anyone could read that. And if I could recall it I would share it with you. I am sure I have read it, but I don't recall it.

Q. You can't tell us, for example, when

the first criteria for assessing the issue of addiction was published?

A. No.

Q. Can you tell us how many sets of criteria for assessing the issue of addiction have been published?

A. No. I could not do that.

Q. Can you tell us which organizations in the 1950s published criteria for assessing the issue of addiction?

A. No. I could not.

Q. Can you tell us which organizations in the 1960s published criteria for assessing the issue of addiction?

A. No. I could not.

Q. Can you describe for us in any way how, if at all, the criteria used in the 1988 Surgeon General's report differ from any prior set of criteria for assessing the issue of addiction?

A. Again, I'm not a historian. I didn't follow the history of what was going on there.

Q. That question -- I'm sorry. Go ahead.

A. Basically, I used actual tools to diagnose that now, to actually come up, because

what we do is we try to do training. And because of my training and education and judgment, basically, what do is we determine how addicted, or the level of addiction that person is.

And as far as the history, that doesn't particularly, it is not relevant to me as much what happened in the sixties and seventies. I'm concerned with helping the patient today.

Q. That is why the ways by which the criteria applied in 1988 differed from prior criteria are beyond the scope of your expertise?

A. As I said, I have read that, but I don't remember them. I had no reason to.

Q. It's not something that you use in your day-to-day work?

A. No.

Q. That's why it is beyond the scope?

A. Yeah. The history portion, yeah.

Q. Have you been involved in efforts to educate smokers regarding the health risks of smoking?

A. Yes.

Q. When were you first involved in those efforts?

A. Probably 1968 or so, somewhere in that vicinity.

Q. What types of health risks did you advise smokers there were that were associated with smoking in 1968?

A. I couldn't even begin to tell you. That was, what, 31 years ago? Probably when I was a college student I was going, as part of my training, we would, in the public schools, talk to young kids and elementary kids and things of that nature. I couldn't even begin to tell you what was discussed at those times.

Q. 1968 would have been four years after the publication of the seminal report by the Surgeon General regarding smoking and lung cancer; is that correct?

A. Yes. It was the first Surgeon General's report.

Q. I presume that that would be one of the many things that you would cover when you went into schools, to educate kids about the risks of smoking?

A. That was some, among a lot of other things. Really what we worked on was really

self-concept, trying to help young people feel good about themselves.

Q. But in terms of educating them about the risks, health risks of smoking, lung cancer would have been one thing that you would include?

A. Yes, probably. I'm trying to think back. Again, it is very difficult to go back 31 years. But I'm sure, because of that '64 Surgeon General's report, there may have been mention of that as well.

Q. Did you have any involvement with the Goldberg Persky law firm before the IBEW case or this case?

A. No.
Q. Had you ever heard of them?
A. No.
Q. How did they find you?
A. I don't have any idea.
Q. How did they first contact you?
A. I don't know. It had to have been only one of two ways. That could have been a telephone call or they happened to be in the building. A lot of people drop into the building. I really can't remember. It would have to be one

174

of those two ways.
Q. What did they tell you when they first contacted you?
A. Just came in and wanted to, I can remember -- I can't remember if there was a telephone conversation, but I do know the first time that they came in. They basically talked about tobacco and just asked me questions just in general about tobacco, just general types of questions. Then, I think, toward the end wanted to know if I was interested in participating or assisting them. I said, Yes, I would like to pursue it a little bit further in terms of discussing and so forth. It was pretty much just general talk.
Q. Why did you agree to testify on behalf of any of these parties?
A. Other than, I mean, I really can't think of anything other than I thought it might be of assistance to them or something. I didn't really see it as -- It takes a lot of time and time that it takes away from the Center. So I don't really, it is a lot of work. So I am not really sure why I did it, to be perfectly honest.

175

Q. Did they first contact you with respect to this case or the IBEW case?
A. I don't know, to be really honest.
Q. Which case was first discussed with you?
A. Again, I really don't remember. I think in the beginning we were just talking general types of talk, and tobacco -- and to be really honest, I still in my mind, the IBEW or this one, I probably have them clear because I'm not, I mean, I'm not out to try to remember all of that information and so forth.
They just called me and would ask me some questions, and I would just share my opinions and my thoughts. I don't know whether they were asking for, about the deposition A or B or which one of those, IBEW or this one. I just didn't pay that much attention.
I get calls all the time, people wanting, from lawyers and people, and from a lot of people that ask questions. And I don't specifically ask them what are some of the specifics of when they are going to use it or what we talk about. It was just a general conversation.

176

Q. What's is the difference between the

IBEW case and the McCune case?
A. I don't really know that much difference. I mean, in terms of what I'm doing, I basically am asked a series of questions and I just respond to them. I don't, just here, as far as all the legalese and the talk that you guys interact with, I don't, that's not my concern. I don't like that aspect of it.
I was just asked to look at treating smokers, and that's what I'm here to actually talk about, I hope, eventually.
Q. For purposes of your opinions, are there any important differences between the IBEW case and the McCune case?
A. I am just responding to questions that are posed, and that's what I will be talking to in the hopes that I respond. I don't really distinguish a great deal between the studies, to be really honest, I mean, between the court cases. I don't, I know that sounds rather odd, but when some people ask me a question I just try to respond accordingly. I don't try to posture my question or say, Oh, this will be advantageous over here, or

this is for that case or this case or whatever. I simply, that is not what I'm doing.
One more thing, I truly would appreciate it if you wouldn't go through all your gyrationins. Obviously, no one can see you on camera, but you're going through a whole series of gyrations every time I'm talking, to be credibly disrespectful, number one. And you're actually making every effort that you possibly can to distract me. You started doing that --
Q. Well, what I would like --
A. Let me finish, please.
And what you do, I think that is incredibly disrespectful. I think if you are asking me questions, I would like to answer them.
But you go through all of these gyrations and faces and look at your colleagues across the table. And I think that is highly inappropriate. What you are trying to do is either rattle me or get me confused or whatever. And I think what you are doing is highly unprofessional.
MR. ROWLEY: Let me move to strike all of that nonsense.
MR. GOETZ: I join in that motion.

MR. GOLDBERG: I move to strike your comment.
THE DEPONENT: Is it really necessary to go through all those facial things?
MR. ROWLEY: I move to strike that.
BY MR. ROWLEY:
Q. What I would like to know, what would like you to do, Doctor, is to answer the question that I ask you. So let me ask you again.
For purposes of your opinions in these two cases, were there any important differences between the cases?
MR. GOLDBERG: Objection.
Q. That's the question I want you to

answer.
MR. GOLDBERG: Asked and answered.
A. I guess again I don't know. I know they are different cases. But, again, that's not the way that I look at them. I am asked questions, and I just respond to the questions. And to me it wouldn't make any difference where I am. I am basically being asked to respond to treating smokers, and that's exactly what I'm doing, or try to do, if we can ever get to that point.

179

Q. Can I infer from that answer that there are no differences between the cases that you can think of that affect your opinions?
A. I am sure there are differences in the cases, but I don't, my opinions are my opinions. They don't, in fact, I don't give you different opinions for each study or, excuse me, for each case.
Q. Are there any differences between the cases that you can name for me today?
A. Again, I just thought I just responded to that. You just asked me the question a little differently. As far as I am concerned, I just respond to some questions that are posed. And I was basically asked to be an expert in terms of treating. That's what I do. And that's hopefully what we will eventually get to.
Q. Does that mean that you can or cannot name any differences between these cases?
A. I probably could not -- on that I would probably have to say that I don't see, for me, any differences. I'm just responding to questions.
Q. Are you charging the Plaintiffs'

180

lawyers an hourly fee, or is it a flat fee? What's the arrangment?
A. It's an hourly fee.
Q. What is the hourly fee?
A. $300 an hour.
Q. Are there any other activities that you engage in for which you are paid $300 an hour?
A. What do you mean other activities?
Q. I'm sorry, Doctor. I can't be anymore specific than that. Are you paid $300 an hour for anything else?
A. No. I mean, this is it.
Q. Are you paid hourly by the Center?
A. The Center? In terms of my salary, is that what are you referring to --
Q. Yeah.
A. -- when you say "the Center"? No. I have a, there I have a salary.
Q. Do you consult regarding any matters other than your consultation with the Goldberg Persky firm?
A. Yes.
Q. What other matters do you consult in?
A. We set up our treatment -- we

181

developed a program called Start Smart, and we have implemented it many places around the country.

People, in fact, want to see what programs might work. I will go in and do that. I will go inand speak to groups.

There is a whole variety of consulting, from pharmaceutical companies, to hospitals, to medical schools, to organizations. So there is just a whole list. It is all in the resumé.

Q. What do you charge per hour to speak?

A. Minimum of 750 an hour.

Q. So every time you give a presentation you charge $750 an hour?

A. Yes.

Q. You said it is a minimum. What is the maximum you charge?

A. Actually, I take that -- I'm trying to think -- I take that back, on terms of 750. Because that, in fact, is, there are some difference, in other words, subtle difference. If I work with professional groups and so forth, I charge them, typically, for a lecture $1500 for the hour.

Q. For an hour?

A. For an hour, $1500 for an hour.

And If I work with public schools and other people that can't afford it, I work more toward the 700 and then on a sliding scale.

But when I speak to professional groups it's always $1500 an hour.

Q. When you speak at the request of pharmaceutical companies, how much do you charge?

A. It's the same, 1500.

Q. $1500 an hour?

A. Yes. And a lot of it -- That is on a sliding, in other words, if I'm asked, if they need a speaker in Des Moines, Iowa, at some hospital and they ask me to present, I would be paid that.

And sometimes they will have a half a day or a day. So a lot of it is on a variety of sliding scales and so forth. But the typical hourly lecture, it is 1500. But I usually have to fly there, either spend the night or fly back. So it may take a full day or maybe a day and a half.

Q. Do they pay your expenses?

A. Yes.

Q. How long have you been giving speeches

and presentations for pharmaceutical companies?

A. For pharmaceutical companies probably 10, 11 years, somewhere in that vicinity.

Q. Are most of these pharmaceutical companies companies make money by selling smoking-cessation aids?

A. That's correct.

Q. These are companies that earn money and income when individuals attempt to quit smoking?

A. Correct.

Q. And these are the companies you are flying around giving speeches for for $1500 an hour?

A. Typically, I don't, occasionally the

pharmaceutical company will actually involve me. But it is a lot of hospitals. Next week I'm going to Maryland. I forget the following. I forget where -- I am going a couple of times next week somewhere. And it is basically hospitals inviting you.

Q. Have you ever gotten a check from a pharmaceutical company for a presentation that you have given?

184

A. Yes.

Q. Including pharmaceutical companies that make money when --

A. Yes.

Q. -- people try and quit smoking; is that correct?

A. That's correct. Typically what happens is, because of the requirements in the law, pharmaceutical companies typically, because they are concerned about conflict of interest, they don't pay you directly; sometimes they pay the hospital, and sometimes I negotiate with the hospital. I think that's the way with virtually all of them now.

Q. So the hospital is kind of a pass-through from the pharmaceutical company to you?

A. No. I don't see it as a pass-through.

Q. I don't mean to put words in your mouth. But the money goes from the pharmaceutical company to the hospital?

A. I think they get a grant, a lecture grant or something, just like all pharmaceutical companies are always giving grants to the hospitals and medical schools and so forth. They get an

185

educational grant to bring speakers in, and I'm probably one of thousands of speakers they have.

Q. In terms of direct payments from these pharmaceutical companies that make money from stop-smoking aids, how much such payments have you received?

A. I couldn't even begin to tell you.

Q. Give us an estimate. Is it closer to one or closer to five?

A. No, it is probably a hundred, hundred and fifty, something like that. I would have to go back, because I can't remember every exact hospital that I spoke at or every presentation or every, a JAMA meeting, or some professional meeting.

Q. How much money have pharmaceutical companies that are in the business of making money from efforts on the part of individuals to cease smoking, how much money have you been paid by those companies, total?

A. First of all, I would like to comment, you keep saying on people, they are making money off of these --

Q. Let me rephrase the question.

A. You need to allow me to finish the

186

question.

Q. I will withdraw the question.

A. I allow you to finish. Shouldn't you

allow me to finish?
Q. Doctor, I'm going to withdraw the question.
A. But you shouldn't withdraw in the middle of my response, should you, once I'm going to say something that you may not like.
But you continually keep saying that they are making money; and, of course, they are. They are a business. Just like the tobacco industry is making money as well. They are a business, but they are helping people in terms of their health becomes better.
So they are assisting. They are helping. They have helped thousands of people to quit smoking.
So even though they are making money, there is some -- They do make money. There is no question about it. They are helping people.
MR. ROWLEY: I move to strike that as nonresponsive.
MR. GOETZ: I move to strike the

answer.
Q. How much money have the pharmaceutical companies paid you?
A. I couldn't really -- You could calculate it out. The main reason is when I first started lecturing, because I was new, it was less. That's why I said 750. Then over time they have increased it. I think the most they pay now, speakers, is, in fact, 1500. And that's, it doesn't go -- No one gets, I believe, that I know of, beyond that.
So it is tough to say because some were paid much less. But you have got a pencil. You know how many lectures. I think you can put the pencil to the numbers and get a general idea. I never done that, sat down and really thought about it.
Q. Give us your best estimate, as you sit here, what the amount of money that the pharmaceutical companies have paid you.
A. Probably fifty to a hundred thousand, something like that. Just trying to get an idea.
Q. Could it be more than a hundred thousand?

A. It is a possibility.
Q. I guess I just don't have, I didn't, I would have to go back to all of my taxes and all of that. I really don't, again, I don't keep track of that.
Q. Could it be more than 150,000?
A. I would be surprised.
Q. Could it be?
MR. GOLDBERG: Objection, the witness -- asked and answered.
A. I mean, it's, I guess it could be, but I don't think. I mean, it would be close. Again, I would have to go back and look.
Q. This is over what period of time?
A. Ten years or so.
Q. Do you serve on committees for any of

these pharmaceutical companies?
A. Yes.
Q. Do they pay you for that?
A. Uh-huh.
Q. How much money have you made from that?
A. Not very much. Actually, the lectures pay much better than assisting them on -- in other

words, they will use for a full day for a thousand dollars or something, as opposed to delivering a lecture in San Diego for 1500 or something.
Q. About how much have they paid you for that?
A. Probably less than 10,000, I would guess.
Q. Could it be more than 10,000?
A. Probably not.
Q. Do you know?
A. No. I just --
MR. GOLDBERG: Asked and answered.
A. I'm guess, even with the 10,000. But I'm pretty sure it less than 10,000.
Q. What about grants?
A. Uh-huh.
Q. How much are the grants, total?
A. Federal grants or just pharmaceutical grants, or what kind of grants?
Q. Grants or funding from pharmaceutical companies to centers or entities with which you are affiliated.
A. Probably two million, somewhere in there.

Q. Two million total?
A. Yes. Probably to be safe, you know, because I understand the next question you are going to ask, say less than about two and a half million. I think that would definitely --
Q. Could it be more than two and a half million?
A. No. It is probably less. But, again, I would have to put the pencil to it.
Q. When you work with a patient in the context of smoking-cessation, do you ever use the products of these pharmaceutical companines that have paid you for these speeches and committees and given you these grants and so forth?
A. Yes. They are the most effective things to help people on the market to quit smoking. So we, in fact, use those to help people quit smoking.
Q. In your reports you have a series of specific questions that are actually numbered in each report; is that correct?
A. Yes.
Q. Did the Plaintiffs' lawyers ask you to express opinions on any subjects other than those

that are explicitly set out in your report?
A. No. I was given a series of questions, and I was asked to respond to those questions, and that's what I did.

Q. You were not asked to respond to any other questions for purposes of your testimony or your involvement in these cases?
A. No. I was asked where I felt comfortable and what my areas of expertise were. And, basically, this is where, in the treatment, the general diagnosis of the nicotine dependence and the treatment is where I felt the most comfortable. And that's where I was asked to participate in this case.
Q. What I'm getting at is whether they have asked to you to express opinions on any subjects in this lawsuit other than the ones set out of your reports?
A. No.
Q. And there are a number of footnotes, of course, in your reports; is that correct?
A. Yeah. Which ones? What in specific are you talking about, references or footnotes? Could you, in fact, show me one.

Q. Both of your reports have footnotes; right?
MR. GOLDBERG: You are referring to references.
A. You are referring to references? Is that -- Your definition of references is footnotes? I don't remember footnotes.
Q. Doctor, look on your September 3rd report.
A. Yeah. What page?
Q. Page 1.
A. Okay.
Q. The first sentence under Introduction.
A. Uh-huh.
Q. Do you see that little thing after the first sentence?
A. Yes.
Q. What is that?
A. That's a number. That's a reference. I have never heard of footnotes before. That's not a very scientific name for references.
Q. These references, you intended these references to reflect what you relied on in making the statements in the report?

A. Correct.
Q. Are there any other references that you can list for me specifically today that you intend to rely in expressing your opinions in any aspect of this case?
A. Not at this time.
Q. Was the two and a half million dollars that you mentioned from the pharmaceutical companies that make smoking-cessation aids just grants?
A. Yes.
Q. Do they fund studies or activities in any other way?
A. Not to us. They do educational grants to hospitals. But we do research grants because it runs through West Virginia Research Corporation.
Q. How much has the West Virginia

Research Corporation received in money from the pharmaceutical industry?

MR. GOLDBERG: Objection, asked and answered.

A. I don't have any idea. I know what I do. I'm one person. There's a lot of professors like myself and doctors that, in fact, get grants

194

on a whole variety of products and studies. I think I have seen where they give 500,000,000 or something in studies from a variety of sources, but I couldn't break it down.

Q. When you advise a patient to use a particular product, do you disclose the hundred thousand here and the two and a half million dollars there and the ten thousand dollars that you have described, to the patient?

MR. GOLDBERG: Objection to the form of the question.

Q. Do you do that, sir?

A. Do I do -- We don't do that. That is not, they are usually in for one of two reasons. They are either coming for a clinical trial, and it is advertised in newspaper. They know specifically, because of a consent they have to fill out, where the money is and what came in. That is very much required by our institution review board.

Then the other thing is, in fact, people that come in to quit smoking, into the Center. And what we do is we sit down and we take a look at, in fact, how addicted they are, we make

195

that determination; and then we look at the various products.

You are sort of implying a little bit that we favor certain drugs over the others. But it is really simple, that our Center has tested as many as more pharmacological adjuncts than anyone in the world to help people quit smoking.

So the gum, the patch, the nasal gray, the oral inhaler and the Zyban have all been approved by the FDA based on studies that we participated in.

So, essentially, everyone that has something out there we participated in.

And there's a lot of products that have been found not to be effective.

So we don't pick one over another. We determine what is best needed for that individual.

Q. It may be my fault, and if it is I apologize, I lost your answer to the question in the narrative.

Do you or don't you disclose these payments to patients?

A. I said -- That was the very first sentence. If you will have the transcriber

196

actually go back, it was in the very first sentence, and I said no. Because there are two different type of folks.

The people that come in to the clinical trials, we reveal everything, because

that's required.
And the others, we don't, just like anyone that's treating, any physician or anyone else, doesn't come in and tell them about their financial interest in what in do to every patient that comes.
So those in particular -- let me finish -- those in particular, we don't disclose that information to them. It has nothing to do with their treatment.
Q. Let me make sure I understand. You don't disclose it to either set of parents?
A. No. I just said that it was disclosed to -- all the research studies, in fact, because we have to explain to them what we doing, what is going on, where the money came from, how many subjects are in the study, how many centers throughout the United States. So they are aware of everything that goes on in the research studies and

in the clinical trials.
Q. And you said that you helped these companies get FDA approval for these problems?
A. Yes, in the sense that we participated in clinical trials.
Q. The clinical trials were an essential element of FDA approval; FDA requires that?
A. Yes. That shows that, in fact, the products work.
A. So it is largely or at least partly as a result of your efforts that these companies are able to sell these product?
A. I'm one of many. There's many, they do multi-center sites. Each product, whenever it is tested, has anywhere from 3 to 10 sites. And they usually have to submit at least two studies to the FDA. So I'm just one of probably 30 or 40 or maybe even 50 people around the country that, in fact, have participated in various ones. We are just very fortunate to have participated in most of them.
Q. You are saying there are a lot of people who get these payments?
A. Yes.

Q. Do you consider yourself an antismoking activist or advocate?
A. No. Like I said, I don't know whether I told you, but my mother is currently a smoker, you know, and that she has always been. And I have brothers and sisters that smoke. And I don't see, I don't like that label at all.
Q. You have never been involved in efforts to restrict smoking, for example, in public places?
A. I am asked all the time to do that and/or testify at various things. I almost always refrain, because I don't like the politics side of it. I don't mean what really goes it. And it is very frustrating, very much like here. I feel like I can't quite answer or feel free to ask because everything is being scrutinized. So it makes it very difficult. And I just choose not to

participate in that and just actually work with smokers, go over and help them, and not get involved in all the politicking that goes on.

Q. What is it about the politics that you don't like?

A. I don't see it as very honest.

199

Q. Not very honest on either side?

A. Probably. There is both sides that have a certain -- I feel the tobacco industry as well. And that there's many activists, but I think that the industry in general, again, this is an opinion, the industry in general, I think is, they are also trying to make money or whatever. And I think that they deny everything until someone uncovers records, and then they give a little bit, possibly. But until that happens they have an agenda and they state a certain point.

And there's many people that are nonsmokers that I am not particularly fond either. They are overzealous. They are just as bad. And their attitude is, This is the way the tobacco industry works. So they feel justified.

I don't particularly feel that way. I just try to quote the research and look at the numbers and help people quit smoking.

Q. I understand. And I guess an example, I have seen things that you have written, which I think are an example of what you are describing, regarding the terminology that ought to be applied within the debate. Do you know what I'm talking

200

about?

A. No. Not quite sure.

Q. You have objected to the use of terminology, particularly, well, the use of, the manipulation of terminology, essentially for political purposes, haven't you?

A. Yes.

Q. And that's something that you feel is inappropriate?

A. Yes.

Q. Do you know to what extent the decision to call smoking an addiction in the 1988 Surgeon General's report was motivated by political objectives or antitobacco company zealotry?

A. No. I don't have any idea.

Q. Have you read the papers of people who were involved with that report, such as Ron Davis, where those folks explained why they reverted to the terminology "addiction"?

A. I know Ron Davis well, and I have read many of his things.

But, again, not having an interest, I know that I have read it in an article or whatever, and it just passes me because I don't have a real

201

interest in it, because I don't like being caught up all those, all those little subtleties and so forth.

Again, what I try to do is to help smokers that need help or want help, is to help them quit smoking. That's what I do.

Q. So the precise extent to which political motivations factored into the decision to label smoking an addiction rather than a habituation or even a dependence is not something that you are an expert at?
A. That's probably true. I was not part of what was going on there. I know that I wrote an article very early about habit and/or addiction. And I think at the time, with the limited information that I had, for me, because I did not know what was going behind the scenes, or what limit info I had, I viewed it probably initially as somewhat a habit.
But then over time, because of the training and the experience and the judgment and working with these smokers, I began, personally began to see it a little bit more as an addiction.
And then I think once I sat down with

that Surgeon General's report that it convinced me. And subsequently, you know, I have, in fact, seen that, based on my judgment and experience, that it is an addiction.
But I don't know the history behind it.
Q. Right. And you don't know why the Office on Smoking and Health decided to change the label from "habituation" to "addiction"?
A. No. I do not.
I do know that things do change over, you know, over time. So they had more information. I was just not privy to any of that at that point in time.
Q. But, to be clear, you don't know why they decided to change that label? That's true? Is that right?
A. That's correct. Other than, just by finishing, I'm not clear why, other than by looking at evidence. I am assuming that that's what they were going on, because the evidence in there, what they were doing is really building a case for an addiction. So they looked at what they thought was evidence. And I assuming they were correct.

I guess when I look at Ron Davis and his crew, and I don't know if he had political motives or whatever, but I tend to see those as, people in the health field, as being, I don't really see an advantage they have to gain by calling it different names or using different terminology, I mean, I just don't see, as opposed to the tobacco industry, who has a potential for many dollars.
Q. Is Ron Davis an antismoking advocate? Does he consider himself to be that?
A. I think he probably does. I mean, I don't know. I mean, I have never really asked him that question directly.
Q. Do you know the extent to which the change in criteria for assessing the issue of addiction affected the decision in 1988 to change the label from habituation to addiction?
A. No. I do not.

Q. Do you know the extent to which the decision to change the label from habituation to addiction was motivated by a desire to turn the tobacco industry green?
A. I'm not familiar with that at all.

204

Q. Do you know --
A. I don't know what you mean turn the tobacco industry green. I don't know what that means.
Q. Green with anger.
A. No, I don't. I'm not familiar with that.
Q. Do you know the extent to which the motivation to change the label from habituation to addiction was motivated by a desire to use a highly evocative word or a word that would stir emotion for tobacco-control purposes?
A. No, I don't. I'm not familiar with any of that.
Q. It may have been a strong motivating factor, it may have been a moderate motivating factor, you don't know?
A. No. I have no idea.
Q. You are familiar, at least generally, with discussions within the medical and scientific community as to the effect -- I think this is actually something that affects what you do day-to-day -- with the effect of how this relationship is labeled upon the perception of

205

smokers as to whether they can quit or not?
A. Yes, I'm not -- that was a rather lengthy question. Could you --
Q. Let me rephrase it. It was --
A. -- a little awkward.
Q. It was a bad question.
There has been and is discussion as to whether or not it is counter-productive from a public health standpoint to call smoking an addiction; that's true?
A. I don't really know that. Again, I'm sure there's been some discussion and some people will say that, whatever.
Q. You have discussed that, haven't you?
A. Yes. I have discussed it.
Q. You have discussed it with colleagues, and you have discussed it in the literature?
A. Uh-huh.
Q. Is that correct?
A. Yes. Probably.
Q. One of the arguments, Doctor, is that referring to smoking as an addiction may be counter-productive from a public health perspective because it implies to smokers that it is impossible

206

to quit. That is one of the argument; is that correct?
A. Yes. I think I have heard that, yes.
Q. Do you believe that is a reasonable position to take?
A. I don't know. I just don't know how you could, in fact, prove that without really doing

a study. I don't know of a study that's done that, or whatever.
Q. Since you don't know whether there's been a study that has examined that issue, you can't say one way or the other whether calling nicotine or smoking an addiction is counter-productive from a public health standpoint?
A. That's correct.
Q. It may well be; you just don't know?
A. Yes.
Q. As far as you know, the medical community and the public health community doesn't know the answer to that question?
A. I don't know. They may know, but they have never told me specifically.
Q. You have never seen a study that's addressed that issue?

A. No. Not that I can think of right offhand. You may find one, but I don't ...
Q. And the idea behind that argument is that if the relationship is referred to as a habit smokers are more likely to realize that stopping smoking is something that they can do with adequate motivation, and it is something that's within their power?
MR. GOLDBERG: Objection to the form. I don't think the doctor has said that.
MR. ROWLEY: I didn't mean to imply that he did say that.
A. Could I have the question?
MR. ROWLEY: Could you read it back.
REPORTER: "And the idea behind that argument is if the relationship is referred to as a habit smokers are more likely to realize that stopping smoking is something that they can do with adequate motivation, and it is something within their power?"
A. I think that's probably when I was still sort of floating whether it was an addiction or a habit, really early in my research career. But I think I may have felt that way at one time or

another. In other words, if you call it an addiction people have a tendency to give up, you know; whereas, if they saw it as a habit they had a little more control over it.
But then subsequently, because of the experience I have accumulated, or whatever, I definitely see it as an addiction.
It is, basically, some of my concepts that have evolved over time. And they have evolved just because, just like everything evolves. We thought the world was flat at one time. Obviously, that was disapproved. The same way here. I may have thought initially that it was a habit. I was taking sort of a tough-love approach.
Then over time I began to see that it, in fact, was, or at least I felt very strongly that it was an addiction; and, ultimately, there is no question in my mind now that I, in fact, think it is an addiction.
Q. I wasn't really asking you about your

views. I was asking you about the rationale for the argument that it is counter-productive to call smoking an addiction.
A. I felt that way, and I think some

209

people felt that way initially. But I don't know if, I haven't heard that used in 15 or more years, I mean I haven't, it could have been, but I haven't heard it in 15 or 20 years.
Q. But what I want to understand is the rationale behind that view, not necessarily when it was expressed.
The rationale behind the view is that if you call it a habit people are more likely to realize that it is within their power to quit. Is that part of the rationale?
A. I think back then it was, yes, way back then.
Q. And part of the rationale for saying that it's counter-productive to call it an addiction was that if one calls it an addiction there is a strong risk that smokers will falsely believe that quitting is not within their power; is that fair?
A. I think, I probably wouldn't use the word "will" only because that implies that is recent. You said "will quit," and that is recent. I think that was theories that were espoused, you know, 15, maybe even 20 years ago. I can't

210

remember. I would have to go back and look at some of those articles.
But I think over time, now, what they are looking at is seeing it as an addiction so people can actually seek help.
Q. Let me rephrase the question.
A. Okay.
Q. The rationale behind the public health objections to referring to smoking and nicotine as addictive was --
A. Were.
MR. GOLDBERG: Objection to the form of the question.
Do you have something you want him to refer to? It is very vague what you are referring to without a specific reference.
MR. ROWLEY: I would appreciate if you wouldn't object in the middle middle of my questions.
MR. GOLDBERG: He was just starting to answer.
MR. ROWLEY: Let me restart the question.
Q. The rationale for the argument that it

211

would be counter-productive to refer to smoking and nicotine as addictive was in part that smokers would react to that label by believing that it was beyond their power to quit; was that part of the rationale?
MR. GOLDBERG: Same objection.
A. I think that was, again, that was 15, 20 years ago, whatever what was. I think that is

when people felt that way.
Over time, again, that has evolved. I don't think that -- that is a question that has not been raised. I haven't heard it in a long time.
Q. But was that the rationale? That is my question. I'm not asking you when it was espoused. I'm asking you was that part of the rationale?
A. I think that was the rationale back then, yes.
Q. You say you haven't heard that in a while, but at the same time you say you are not aware of any scientific evidence on either side of the argument; right?
MR. GOLDBERG: Objection to the form of the question. That's not what he said.

Q. You are not aware of any scientific evidence on either side of the argument, are you?
A. Not on whether, not on that specific little topic.
Q. Very good. Therefore, scientifically you don't know which position is correct?
MR. GOLDBERG: Objection. He has already answered.
A. I have already that. Yeah, I think I have. I think, again, because of my training, education and judgment over time we have come to, I have come to the realization and the conclusion that that is simply not true.
I mean, because someone thinks it is -- you are basically saying that back then because, if someone saw it as an addiction then they were less likely to seek treatment or thinking they needed, they would not be able to do it themselves.
Q. Right.
A. That's what you are saying. And that, in fact, may have been true back then.
But, again, because of my training and experience over time, and I think most people, the reason it's become obsolete is because that, in

fact, is simply not the case. Because if you look at the history of the smoker, that has changed dramatically.
I am generalizing a little bit here, but the smoker many years ago, 1950 or so, smoked fewer cigarettes; then subsequent, say 15 years ago, it was closer to 20 cigarettes; and in the past few years it went up to about 26 cigarettes; and it is beginning to drop a little bit, because the price is, in fact, going up. And that's my sort of take on that. And what we are being left with is kind of a more recalcitrant, more addicted smoker.
You know, those easy-quits, those people who can quit on their own, in fact, have. So now the people that are addicted are seeking help, beginning to seek more and more help.
Q. Have smokers become more or less recalcitrant since the label changed from habit to addiction?
A. I wouldn't know that. I mean, I

wouldn't, you know, as far as the specific label change.

Q. Has it become more or less difficult

214

for smokers to quit since the label changed from "habit" to "addiction"?

A. More difficult to quit? I couldn't give you specifically. I could generalize or offer an opinion, but I couldn't, that would be just an opinion.

Q. Please generalize or offer an opinion.

A. I believe, at least from our experience, that people that, in fact, because of the Surgeon General's report, knowledge about tobacco that is coming out, people are setting them down and, in fact, you know, making efforts to quit and seeking help.

And really what you have gotten rid of is a lot of people that, in fact, could possibly experience withdrawal, maybe quit on their own, where the people you are being left are with now are really beginning to seek a great deal of help. These are people that have made four to seven serious attempts before they are ultimately successful.

So it is becoming very, very difficult for most of them to quit.

That's my judgment and my take on what

215

is happening with the time.

Q. Do you believe it is more difficult for people to quit now than it was in 1987?

A. Again, because of the level of smoking that you have, you have, because of information that is out there, many of the people that, in fact, there is a small percentage, as you know, that can quit on their own, and many of those, in fact, have. What you are being left with are those that can't or have a real difficult time quitting.

So, theoretically, you can argue that they are more recalcitrant, a little more addicted or people that have a more difficult time quitting.

Q. Is there a scientific study on this recalcitrance issue?

A. I think it has been mentioned in the literature a few times. Basically, again, this is based on my training and my education and my judgment over time and having worked literally doing my dissertation in 19, I think I completed it in '75, '76, somewhere in vicinity, it's almost 25 years of tobacco research experience. So, basically, it is something that has evolved in working with these, well, it is my judgment based

216

on all the training and experience that I have.

Q. Setting aside personal experience and anecdotal evidence, is there a scientific study on this recalcitrance issue?

MR. GOLDBERG: Asked and answered.

A. Yeah. I thought that, basically, I answered that earlier.

Q. You didn't.

A. Yes, I did. I think if you go back

over --
Q. Do you have the citation for the study?
A. What study? I told you there was no study earlier.
Q. Thank you. I didn't hear --
A. How many times do you --
Are you hard of hearing?
Q. No, I'm not.
A. I have said that several times, you know, that there was, I know of no study, and basically I was referring to my training, my education and my judgment over time. This is what I'm perceiving and this is what is my opinion.
And you keep going back and making the

same points over and over.
Q. Let me make sure that I understand what you just said.
There is no study that you can name for me today that followed the scientific method on this issue of recalcitrance?
A. That is correct. Just like there is no study, as well, saying that, what you were sort of implying before, by calling it addiction people are less likely to quit. There is no study that, in fact, shows that either. There is discussion in the literature. But that, again, was 15 or 20 years ago, and there is nothing that shows that either.
Q. There is no study that demonstrates the relationship between the label that is chosen, that is to say, habit or addiction, and people's desire or motivation to quit; is that true?
MR. GOLDBERG: Objection, unclear.
A. I answered it, yes. No, it is sort of clear to me. But I think I answered that, I'm not aware of any study, and still not.
MR. GOLDBERG: Do you need a break?
THE DEPONENT: Actually, I need to go

to the bathroom.
MR. ROWLEY: Absolutely. Anytime you need a break, just say so.
VIDEOGRAPHER: We are now back on the record.
BY MR. ROWLEY:
Q. Doctor Glover, do you agree with the statement, It appears that the perception of smoking as nonaddicting or as a habit by the smoker may be a significant factor related to successful cessation for a great number of smokers?
MR. GOLDBERG: Objection. You're reading from something. I think the doctor --
A. I was going to ask, number one, could you do it again and then let me take a look at the entire context of that sentence?
Q. Yes. Let me ask you first --
A. Sure.
Q. -- does the truth of a statement depend on who said it or where it appeared?
A. No. But I would like to see the context, you know, what was said just before it or

just afterward. I think pulling out a statement or something is sort of misleading.

219

Q. Let me read it again. And if there are contexts in which you would agree with the statement, I want you to tell me that; and if there are contexts in which you disagree with the statement, I want you to tell me that.

"It appears that the perception of smoking as nonaddicting or as a habit by the smoker may be a significant factor related to successful cessation for a great number of smokers."

A. So the question is?

Q. Do you agree with that statement?

A. I think maybe many, many years ago I may have agreed with that statement; but I wouldn't agree with that anymore.

Q. At the time that you agreed with that statement, what was it that made it appear that the perception of smoking as nonaddicting or as a habit by the smoker may be a significant factor related to successful cessation for a great number of smokers?

MR. GOLDBERG: Object to the form.

A. I think when I first got into tobacco research I may have felt that way; but over time it became apparent to me, again, because of my

220

training and education and many conferences attended and so forth, that it became obvious to me that it was an addicting drug. But, again, I felt that way many, many years ago.

Q. I appreciate that. But if you could tell me what it was at that time, at the time that you believed that be to true, that made that statement appear to be correct? What was it?

A. I don't know. Again, that was in my beginning research career, and that was probably just some of my initial impressions. And so many things have changed over time, again, based on the experience and working with people, that there's a lot of things have changed that I thought were true 20 years ago, 15 years ago, that, in fact, are not true today.

Q. Did you have -- Do you recall making that statement, by the way?

A. Yes.

Q. Did you have any basis for that making that statement?

A. I think that was in the beginning. What year was that? I lose track of the year.

Q. I'm asking you right now. Did you

221

have any basis for it?

A. That was my impression, again, in the beginning, because the research career, relatively new, you can't work in a vacuum; you form impressions and opinions and judgments based on the training and experience. And at that point in time I was very inexperienced. I was just beginning.

Then over time I began to realize that, in fact, it was addictive.

And my opinions have slowly changed on

many issues.
Q. When did you start your research career, what year?
A. Probably, I graduated with my doctorate in '76, I believe. That's 23 years ago or so. Somewhere in that vicinity.
Q. '71?
A. '76, somewhere in there.
Q. And you started your research career shortly thereafter?
A. Yes. That's when I initially kind of began to kind of get involved. I didn't begin to really get actively involved in research until many years later, because we didn't do, the level of

work that I was doing is totally different 25 years ago than it is now.
Q. Have you ever researched the question of whether the perception of smoking as nonaddicting or as a habit by the smoker may be a significant factor related to successful cessation for a great number of smokers?
A. No, never really researched it.
Q. Are you aware of anyone who has researched that specific question?
A. No. Not really. I am trying to think. I am sure they have because that was such a common question back then; but as people evolved that changed.
Q. Are you aware of any study on that specific question, a scientific study, that answers the question either way?
MR. GOLDBERG: Objection, asked and answered.
A. Yeah. I mean, I have answered that several times several different ways. And, no, I do not.
Q. When you are a co-author of a study with other authors, do those other authors

contribute to the particular paper on which their name appears?
A. Yes.
Q. They review the paper?
A. Uh-huh.
Q. I'm sorry. You have to answer --
A. Yes. I'm sorry. They do. We all participate in the writing of it. That is part of the requirement.
Q. And they approve the contents, obviously, because their names are on it; is that correct?
A. Yes.
Q. Has that been true of everything that you have co-authored that's appeared in the published literature?
A. No. Not necessarily.
Q. Give us, tell us when that hasn't been true.
A. Sometimes an interpretation can be we might disagree. We don't -- As researchers, not everyone agrees on a concept, and it's something, I may view something a little differently than

someone else. So we don't all agree, but we come

224

to some kind of agreement, because it is a combination of all of our work, not just an individual.

Q. Nonetheless, the contents of the paper is approved by all the co-authors?

A. Correct.

Q. Was the contents of the paper in which you expressed the opinion that it would be, might be counter-productive to label smoking an addiction approved by your co-authors?

A. Yes. I am sure they were, because we all participated in the paper.

Can you remember or just tell me who the co-authors were? Just curious.

Q. I put the paper away.

MR. GOLDBERG: Could he see the paper, please.

THE DEPONENT: Do you have the resumé I will look it up myself.

It would be easier if you gave me it. I am just going to look it up.

MR. ROWLEY: Is there a question pending here?

MR. GOLDBERG: Yes, there is.

225

MR. ROWLEY: I need to be reminded of what it is.

THE REPORTER: "Was the contents of the paper in which you expressed the opinion that it would be, might be counter-productive to label smoking an addiction approved by your co-authors?

"Yes."

(Additional text read.)

MR. GOLDBERG: May we see the paper, please, that you were referring to? The doctor has asked to see that.

MR. ROWLEY: There is no question pending.

MR. GOLDBERG: Well, there is a paper that you used a few minutes ago for questioning, and now you are refusing to let the doctor look at it, is that what you are telling me?

MR. ROWLEY: Are you looking at my notes and what I'm referring to in asking questions, Counsel?

MR. GOLDBERG: So you are refusing to let the doctor look at the paper --

MR. ROWLEY: How do you know whether I have the paper, Counsel?

226

MR. GOLDBERG: It is obvious. You said you had it.

THE DEPONENT: And he was just reading from it. I saw it.

MR. GOLDBERG: He can play games.

THE DEPONENT: That's what this is all about.

MR. ROWLEY: Let me know when you are ready for the next question.

MR. GOLDBERG: We will let you know, since you have refused.

MR. ROWLEY: Let me dig the paper out.
THE DEPONENT: No, I have got it now.
MR. GOLDBERG: Let him get it out.
Q. You no longer want the paper, Doctor?
A. I was actually looking for the co-authors. I just wanted to see who, in fact, participated. I have done so many, I just wanted to see who was there.
Q. So you don't need the paper anymore?
A. No. Thank you very much.
Q. You are welcome.
Let me know when you are ready for the next question, please.

A. Thank you.
Q. Are you ready for the next question?
A. Yes.
Q. Doctor, do you know why the first report that was furnished to us in this case was a photocopy of your report in the IBEW case?
A. A photocopy? I mean, I didn't supply it to you. I don't know.
Q. I will simply represent to you that Plaintiffs' counsel in this case, as your first report, submitted to us a photocopy of the report that you drafted for the IBEW case. Do you know why that occurred?
A. No, not really. I am sure if you want an original I can get you one, because it is on my computer. I don't know whether I gave an original and it was copied. I may have even given them copy just to save money.
Q. Do you know why a report that was identical to the one that you submitted in IBEW was submitted to us in this case?
A. Did I know one was submitted?
Q. Do you know why identical reports were submitted in both cases?

A. I guess I'm not sure what you are asking, identical reports, because it couldn't have been submitted to other one when I didn't have the second one. I guess I don't understand your question.
Q. The first report that was submitted to us in this case --
A. Can you go by dates? It would be a lot easier for me.
Q. The May 25, 1999, report -- do you have that in front of you?
A. Yes.
Q. -- that was submitted to us in this case, which is called McCune, says, in the regarding line -- why don't you read what it says on the Re line. What does it say?
A. The September 3rd?
Q. Yes.
A. McCune and Philip Morris?
Q. No, sir, May 25, 1999.
A. IBEW.
Q. Exhibit No. 1, do you see that?
A. Yes. I have Exhibit 1. I'm assuming it's May 25, IBEW.

Q. Yes, sir. Here, I will show you. Here is Exhibit No. 1. Are you now looking at Exhibit No. 1? Does it say "Exhibit No. 1" on it, sir?
A. Yes.
Q. What does the Re line say on Exhibit No. 1?
A. IBEW Health and Welfare Fund versus American Tobacco Company.
Q. This is the report that you prepared for that case?
A. Uh-huh.
Q. Can you tell us why this report was submitted to the defendants in the McCune case?
A. Oh, I think I was asked for that. I mean, it went to the same place.
I guess I'm not sure what you mean.
THE DEPONENT: Am I missing something?
MR. GOLDBERG: I don't know what he is asking.
A. I guess I'm not sure, because they were both made to the same law firm, and they had copies of both of them. So I didn't, I don't remember resubmitting another one or whatever. I

mean, the same law firm had both of these. I guess I'm not quite sure what you are asking.
Q. Did you draft Exhibit 1 for the McCune case?
A. No.
I mean, Exhibit 1 here is for the IBEW.
Q. Right. Were you aware that Exhibit 1 was submitted as your initial report in the McCune case?
A. No, I did not know that.
Q. You didn't know that?
A. No, I did not.
Q. Did the Plaintiffs' lawyers ask you, before they submitted Exhibit 1 to us in the McCune case, whether it accurately reflected your opinions for the McCune case specifically?
A. I don't think when they were submitted, or maybe sounds like there was some confusion there. I submitted them based on they were accurate. And I am sure that is what they assumed as well.
I don't remember anyone specifically asking me is every sentence or is this sentence

accurate or whatever. I don't -- When I turn in I'm assuming that it is correct.
THE DEPONENT: And, again, here we go again. I would appreciate if you wouldn't keep rolling your eyes and rubbing your head and doing all kinds of little crazy gyrations trying to distract me. The camera is not aware of that, but I am.
And it is terribly distract, incredibly disrespectful.
MR. ROWLEY: Yes.
THE DEPONENT: I don't think much of

you as a professional, to be perfectly honest.
MR. ROWLEY: Move to strike all of that.
THE DEPONENT: Sure feels good to say it, though.
MR. ROWLEY: Move to strike that.
Q. What did you know about the Plaintiffs in the IBEW case?
MR. GOLDBERG: Objection, asked and answered.
A. Again, I was asked to fill a report or was asked some questions, and I responded to those

questions. Then I was asked to respond to some subsequent questions, and I responded to those questions.
As far as the lawsuit and so forth, or whatever is going on, I choose not to get involved and am not particularly interested of what is going on in that political realm.
All I did was respond to some questions and submitted them. It is as simple as that.
Q. Did you know anything about the plaintiffs in the McCune case at the time you drafted Exhibit 1?
A. No. I didn't ask or anything.
Q. Did you know anything about the named plaintiffs in either case, McCune or IBEW, at the time you drafted either of your reports?
A. No. I'm assuming McCune is an individual. That's about it.
Q. Do you know for certain whether McCune is an individual?
A. No. I do not. I think I have a mental block for those because it smacks too much of things I don't particularly want to get involved

in.
Q. How many named plaintiffs are there in the McCune case, Doctor?
A. I don't have any idea.
Q. Do you know the names of any of the named plaintiffs in the McCune case?
A. No. I don't have any idea.
Q. Have you reviewed any of the medical records of the named plaintiffs in the McCune case?
A. No. I have not.
Q. Have you interviewed any of the named plaintiffs in the McCune case?
A. No. I have not. If I don't know them, know their names, I surely wouldn't have interviewed them.
MR. GOETZ: Move to strike that comment.
Q. Do you know the medical histories of any of the named plaintiffs in this case?
A. It's the same there. If I, in fact, don't know their names or who they are, I haven't looked at any medical histories or anything relative to them, I know nothing about those.
I was just asked to questions and

asked to report on paper. That's exactly what I have done.
Q. Have you ever heard the name Darrell Blanenkenship?
A. No. Not that I know of.
Q. Have you ever heard the name Michelle Casto?
A. No.
Q. I take it that since you have never heard of either of Mr. Blankenship or Ms. Casto you have not formulated any opinions regarding them specifically?
A. No. I don't even know what they are involved or -- I don't even know who they are, to be perfectly honest.
Q. Do you know Mr. Blanenkenship's age?
A. No.
Q. Do you know Ms. Casto's age?
A. No. I don't know who they. I surely don't know their age.
Q. Are either one of them smokers?
A. I don't know.
Q. Have either one them ever been smokers?

A. I don't know.
Q. If they smoked, do you know the brand they smoked?
A. No.
Q. Their smoking history?
A. No.
Q. Do you know anything about their smoking, if they smoked?
A. As I answered previously, I don't know who they are or whether they smoke, or if I don't know they smoke I should not know anything about their previous smoking history. Don't know anything about them.
Q. Has Mr. Blankenship ever attempted to quit smoking?
A. I don't know.
Q. Has Ms. Casto ever attempted to quit smoking?
A. I don't know.
Q. Do you know whether Mr. Blankenship's attempts to quit, if any, are representive of attempts to quit by other smokers in West Virginia?
A. I don't have any idea. I don't recall any of those names or whether they made attempts or

their smoking history or whatever. I mean, they could have, at one time or another, there is always a possibility they could have come to the Center. But I don't remember them from, anyone, don't even know if they are West Virginians, to be perfectly honest. I have no idea who those people are, at least I don't.
Q. Do you know whether Mr. Blanenkenship's smoking history is representative of the smoking history of any other smoker in West Virginia?
A. I don't know who Mr. Blanenkenship is.
Q. Therefore, you don't know whether his

smoking history is representative of the smoking history of any other smoker in West Virginia?
A. If I don't know Mr. Blanenkenship, that's a pretty good assumption.
MR. ROWLEY: Move to strike that as nonresponsive.
A. No, I responded. You are just going around in circles, and you keep asking the same question over and over. And I'm trying to respond to the question. If I don't know who they are, where they came from or their smoking history,

obviously, I don't know their shoe size or their size of belt. I don't know whether they smoked four cigarettes, whether they liked them in the afternoon, whether they like them in the morning. I mean, I don't know the people. It is that simple.
Q. Was Mr. Blanenkenship's smoking history representative of any other smoker in West Virginia?
A. I don't have any idea.
Q. Thank you.
A. I don't know who he is.
Q. Was Ms. Casto's smoking history representative of any other smoker in West Virginia?
A. I don't have any idea.
Q. Were Mr. Blanenkenship's, the character of his attempts to quit, if any, representative of the character of the attempts to quit of any other smoker in West Virginia?
A. Since I don't know him, I would have to answer that I have no idea.
Q. Is Mr. Blanenkenship representative in any way of any other smoker in West Virginia?

A. I don't know Mr. Blanenkenship; so, therefore, I can't answer that.
Q. Is Ms. Casto representative in any way or in any respect of any other smoker in the state of West Virginia?
A. I don't know her; therefore, I couldn't answer that.
Q. Can you tell us what risk factors for smoking-associated disease Mr. Blanenkenship has been exposed to?
A. I don't know Mr. Blanenkenship, so I cannot answer that question.
Q. How about Ms. Casto?
A. I don't know Ms -- Casto you are saying?
Q. C-a-s-t-o, Michelle Casto.
A. I don't know Michelle Casto; and, therefore, I have no idea.
Q. Do you know either Mr. Blankenship or Ms. Casto's history of occupational exposures, their weight, their family history for smoking-associated disease, their radon exposure, their stress levels, their use or nonuse of drugs or alcohol?

A. I don't know the individuals in

question. Therefore, I don't know anything about them.
Q. Would I be correct in saying, Doctor, that you have made no effort to compare in any way any aspect of Mr. Blanenkenship or Ms. Casto's background, exposures, personality traits, psychological make-ups or attributes with those attributes and characteristics within the general population of smokers in the state of West Virginia?
A. I don't know either of the persons involved that you just mentioned; therefore, I would have to answer negative to all of that because I don't know anything about them or who they are.
Q. Have either Mr. Blankenship or Ms. Casto been enrolled in a smoking-cessation program?
A. I have no idea. I don't know either one of them.
Q. Is their history of enrollment in smoking-cessation programs representative of any other smoker in the West Virginia smoking

population?
A. Since I don't know them I have no idea relative to what programs they may or may not have been involved in, their history or anything about them.
Q. Did either Mr. Blankenship or Ms. Casto have regular medical screenings or physical examinations?
A. Since I don't know either one of them, I have no idea.
Q. Can any one smoker's smoking history be representative of the smoking history of an entire state of smokers?
MR. GOLDBERG: Objection. The question is unclear as to what you mean or for what purpose is representative.
Q. Go ahead, Doctor.
A. Can you ask the question again?
Q. Can any one smoker's smoking history be representative, in a scientific way, of the smoking history of every individual who smokes within a state?
A. Something can be representative of virtually anything. When in a sample, you come up

with kind of set averages or whatever you can come up with what a typical person might be in virtually anything that you do. So I'm sure that is possible.
Q. Is Mr. Blanenkenship typical in any way with respect to the population of smokers in West Virginia?
A. I don't know Mr. Blanenkenship, so I have no idea if he is typical.
Q. Is he average with respect to any factor or attribute or characteristic in comparison to smokers in West Virginia?
A. I don't know Mr. Blanenkenship, so I couldn't really respond to that question. I have

no idea.
Q. How about Ms. Casto?
A. The same way. I don't know her or anything about her her, therefore I couldn't say that she was representative of anyone.
Q. Before formulating and finalizing your opinions in this case, were you asked to look at any information at all, medical records, interviews, depositions, summaries, statements, any information regarding Ms. Casto or Mr. Blankenship?

242

A. No. I have never even heard their names until today.
Q. You don't mention Ms. Casto and Mr. Blankenship in either of your reports?
A. No, I do not.
Q. You don't mention in them in your IBEW report or your McCune report?
A. No.
Q. Did you hear Plaintiffs' counsel a few moments ago mention class certification?
A. Yes.
Q. Did he tell you that you have been designated as a class-certification expert in this case?
A. I have heard people talk, but I have no idea what the term means, to be perfectly honest. I have a general idea but nothing, I really don't understand the term.
Again, I'm just responding to questions and giving my impressions and my thoughts based on my experience.
And I'm not quite sure what a class-action suit is, to be perfectly honest. I'm beginning to get an idea as I hear more and more

243

about it. But two or three months ago I had no idea. I don't know if I really care to know to be perfectly honest. I think I can do without it.
Q. Are a class-certification expert?
A. I'm not sure what that means.
Q. So you don't know one way or the other?
A. I feel my expertise, again, lies in the diagnosis, general diagnosis of nicotine dependence and then actually in the treating.
When it comes to that area, there's very few people that have actually worked with as many smokers and treated as many smokers as, in fact, we have.
As I have said earlier, we have tested more pharmacological adjuncts than anyone, so we are very familiar with that. And that's where expertise I, where my expertise lies.
I have no idea, in terms of law, whatever, class-action suits. I'm just asked my opinions. I'm just trying to provide those.
Q. Before formulating your opinions in this case, or even after you have formulated and finalized your opinions in this case, did the

244

lawyers explain to you the process of class certification?

A. No. Again, I've just heard the term. They didn't explain anything like that to me.
Q. Did they explain to you what factors are taking into account in deciding whether a class should be certified?
A. No.
Q. Did you consider any of those factors in formulating and finalizing your opinions?
A. No.
Q. Have you ever testified before as a, well, we know you have never testified as a class-certification expert because you've never testified.
A. Correct.
Q. Have you ever been retained as a class-certification expert before McCune?
A. I have no idea.
Q. Were you a class-certification expert in the IBEW case?
A. I don't have any idea. I mean, I know that sounds rather odd, but I don't, to me I was just asked to write a report and express my

opinions. And I don't know, my expertise, again, I don't know exactly what the class action suit is.
My expertise is, basically, in treating nicotine-dependent smokers. That's what we do, and that's what we've been doing for years.
As far as all, I don't really understand what a class-action suit is or what it is. So I don't know if I was designated an expert.
Q. By looking at your CV or anything else that you have in front of you, can you tell us what it is that qualifies you as a class-certification expert?
MR. GOLDBERG: Objection. That's for a court to decide.
A. I think what they want, they needed someone who, in fact, could do treatments and understand treatments. Again, that's my expertise.
As far as class action, I have no idea whatever a legal term you wish to use, and I'm sure you could dazzle me with your information about all the different kinds of cases there are. But I have no idea. I was basically asked some questions about my expertise, and that's what I responded to. And that's what I'm basically here for, which we've

never gotten to.
Q. Have you read the Complaint in this case?
A. No, I have not.
Q. Have you read the amendment or amendments to the Complaint?
A. No, I have not.
Q. As a class-certification witness, do you know how the proposed class has been defined for purposes of this case?
A. No. I have no idea.
Q. Before formulating and finalizing your opinions in this case and reducing them to writing in your reports, did you have information as to how the class, the putative class was to be defined?

A. No. I have no idea.
Q. Did you take the definition of the putative class into account in formulating and finalizing any of your opinions?
A. What are you saying, putative class?
Q. Yes.
A. Is that a legal term?
Q. The class that --
A. I have no idea what that is.

Q. The class of people who would participate in the lawsuit.
A. No.
Again, I was just asked my opinions, which I actually presented and wrote and that's pretty much it.
Q. As a class-certification expert, do you have any knowledge of the proposed scope of the class that has been proposed in this case?
A. No, I do not.
Q. Do you know who would be in the class?
A. I guess I'm still, I don't know what you are really asking in what class or class. I have an idea of what class certification is and so forth. But, generally, when you say in the class, I'm not really quite sure, again, you're talking legal terms which I have no idea what -- I would rather not respond rather than say something that I'm not sure of.
Q. Do you know who would be included for participation in the lawsuit?
A. No, not really.
Q. Do you know who --
A. I just know it's people in West

Virginia, but that's about it.
Q. Do you know who would be excluded from participation in the lawsuit?
A. No.
Q. In formulating and finalizing your opinions in this case, particularly your class-certification opinions, that Plaintiffs' counsel referred to earlier, did you take into account the scope of the class or group of people who would participate in the relief sought in this case?
A. No. Again, I was not familiar or privy to any of that information.
Q. They didn't bother to tell you about that?
A. No. I was given a series of questions and asked to respond pretty much.
Q. Before you --
A. And again, it's not, I'm sure they may have, if I were inquisitive and would have inquired they may have told me. I don't have any idea. I just chose not to. I just wanted to keep it as clean as possible and just respond to the questions and not be involved in all the other aspects of it.

Q. Okay. You're saying that you don't have any reason to think that it's a secret?
A. What is that?

Q. The scope of the people who would participate in this, in the relief that is sought. Is that a secret?
A. I guess I'm not sure what secret, who is participating.
No, I just particularly did not particularly need or want that information. That would have nothing to do with what I said. To me treatment is treatment is treatment. So what whether it's one person or five people or a thousand it just makes no difference.
Q. So as I understand your testimony, the scope of the class or group of people who would participate in the relief sought in this case is, in your mind, irrelevant to the opinions that you have expressed? Fair enough?
A. Yeah. I'm trying to think. Yeah, that's pretty much. I have no idea what is really involved behind the scenes. I was asked to respond to some questions, which I did.
Q. Can you think of any way, in your

mind, that the question of who would be in or out of the group -- well, let me rephrase that.
Did the Plaintiffs' lawyers discuss with you the process by which class members, or the group of people who would participate in the relief sought in this case, would be identified?
A. No. They never mentioned it.
Again, I don't really quite understand, even now, as you are asking me these, I feel very uncomfortable because I'm not quite sure, I have a general idea, of what a class-action suit is.
Q. I understand that.
They didn't ask you, obviously, to formulate any opinions as to how the class members would be identified, because that issue is not addressed in either of your reports?
A. No. Again, I just responded to a series of questions that were given to me, and that's what I responded to.
Q. And if a particular question is not explicitly set out in either of your reports, you weren't asked to render an opinion on that question?

A. No.
Q. Is that correct?
A. Yes, that's correct.
Q. Did they, did the Plaintiffs' lawyers ask you to formulate opinions regarding an appropriate cessation program that would be tailored for Mr. Blanenkenship's needs specifically?
A. No. I don't know Mr. Blanenkenship at all, and I was not asked that.
Q. Did they do so with respect to Ms. Casto?
A. No. The same there. I don't know her, and I was not asked to do that.
Q. And since you don't know whether either of those people smoke or smoked, you don't

know whether they should be in smoking-cessation; correct?
A. That's correct. If they smoked they should be, but if they don't smoke I think it would be pointless if they are nonsmokers.
Q. Do either Ms. Casto or Mr. Blankenship have any interest in participating in a smoking-cessation program?

252

A. I have no idea. I don't know either one of them.
Q. Could either one of them quit without a smoking-cessation program?
A. There is a possibility, yes.
MR. GOLDBERG: Objection to the form of the question.
A. You know, there's some people that go the numbers. You know, two percent will quit on their own. Some of the numbers will go a little bit higher, up to 10 percent. So there's a range, depending on which study you are looking at.
So, as you and I know, there are some people that will quit on their own. But if they, in fact, went through a treatment program, they might in fact quit sooner than before.
Q. But you don't know anything about Ms. Casto or Mr. Blankenship --
A. No. I don't know either one of them.
Q. -- that would allow you to evaluate whether those statements are true or not with respect to them?
A. With respect to them, no.
Q. Can you tell us whether smokers who

253

are not dependent on nicotine would be eligible for participation in this lawsuit? Do you know?
MR. GOLDBERG: Objection to the form of the question. It is vague what you mean by your words.
A. Again, I don't really, I'm not really quite sure, with the class-action suit, I don't know who it involves or what class you are saying. So I'm not really sure. So I'm not really sure if it's smokers or nonsmokers that are bringing this up again.
It's relatively simple. I was given some questions and asked to respond to those, and that became my written deposition. And then we proceed a little bit further, said I was going to be asked to testify, and basically here I am.
Q. Do I understand your testimony correctly, you don't know whether smokers who are not dependent on nicotine would be eligible for whatever program was instituted and be in the class?
MR. GOLDBERG: Objection to the form of the question.
Q. Did I understand that?

254

A. Could you go over that again?
Q. I will read it again.
Is it your testimony that you don't know whether smokers who are not dependent on

nicotine would be eligible for whatever program might be instituted and be in the class in this case?

A. Again, using terminology that I don't know, being in the class. I don't understand that.

If someone is smoking, you know, they need to be in a treatment program. That I can say yes to. But I don't know what you are talking about "in the class."

Q. Did the Plaintiffs' lawyers explain to you what relief is being sought in this case?

A. No, not really. I mean, I don't, when you say "what relief," I'm not really quite sure what you mean even there.

Q. Did they explain to you what they want as a result of filing this case?

A. No.

Basically, I was told that there was a series of experts and my expertise was going to be the general diagnosis and treatment of nicotine

dependence, and that someone else would be testifying in another area, whatever, and there were going to be several of us doing that and that we were going to be part of an overall group.

I was not told, even though I can see, I don't even know what IBEW refers to, to be perfectly honest.

Again, I didn't ask those questions or really care because I don't like the, you know, that side of getting involved. I use my energies a little bit differently.

Q. So when you did your report in the IBEW case, you didn't know whether IBEW was an acronym or a word?

A. Yes. I mean, well, probably not a word since it's all capitalized, but it's probably some kind of acronym. Whereas, in the previous two, when I did depositions, I actually looked at people's records and so forth. But these two were totally different than the first two that I actually prepared reports for.

Q. In the only two prior cases that you have been involved in, you actually looked at medical records to assess the backgrounds of the

individuals who were making the claims; right?

A. Yes. I looked at a whole variety, a big folder of items to look at.

Q. You didn't do that in this case?

A. No.

Q. You weren't asked to do that in this case?

A. No.

Q. You didn't ask to see those things?

A. No, because that's not what I was asked to do.

Q. You didn't understand your role in this case to have anything to do with the backgrounds, exposures, characteristics or other attributes of any of the people who might participate in the relief that the Plaintiffs seek in the case; correct?

A. Again, I was just asked a series of questions which I responded to, and that's pretty much it. I didn't inquire. I knew there was a lawsuit, and I knew in general what was going on, but I did not inquire about the specifics.

Again, I like to present my information independently of what's going and hope

257

that it stands by itself, because that's what I believe. And it wouldn't change any different if I knew the people or knew thier background or their history. That's not -- I like to present a dispationate point of view as opposed to get involved in any kind of emotion or whatever.

Q. When you see a patient for a smoking-cessation purposes, do the characteristics and attributes of that patient have any effect on the therapy that you recommend for that individual specifically?

A. Yes.

Q. Regardless of who ends up participating in this case, if anyone, in terms of West Virginia smokers, you haven't made that assessment with respect to any of those people in this case; right?

A. No, I have not. Again, I don't know any of those people or who they are, so I have not made any assessments like that whatsoever.

Q. Do you know, Doctor, from any data that you have seen, what percentage of smokers in West Virginia have available to them smoking-cessation programs through work? I'm

258

looking for a number.

A. No, I don't know in the state, entire State of West Virginia.

Q. Do you know from any data that you have seen what percentage of smokers in West Virginia are actually in, currently in smoking-cessation programs?

A. No. I don't have any idea. I know how many are in ours, but I don't know throughout the entire state.

Q. Do you know what percentage of smokers in West Virginia, from any data that you have seen, have no interest at all in being in a smoking-cessation program?

A. No.

I think I'm generalizing here relative to the studies, but I think it's true that almost all those surveys, in terms of self-reports, the numbers go up, go as high as 90 percent of the people that want to quit, you know, that have an interest in quitting but because a variety of reasons, specifically withdrawal, choose not to participate because physically it's a little too demanding for them.

259

Q. Do you know, what I'm asking is are there any survey data or scientific data that would allow you to conclude with respect to the West Virginia population, specifically, what percentage of smokers, if asked, and offered smoking-cessation

would say, I am not interested in that?
A. No.
MR. GOLDBERG: Asked and answered.
Q. Regardless of the reason?
A. No.
Regardless of the reason? Let me see.
Q. Do you know the percentage?
A. No, I do not. But I'm sure that can be found. The state health department, I believe in fact, has collected that information.
Q. But for purposes of formulating and finalizing your opinions in this case, you weren't asked to assess that issue, were you?
A. No.
My response, I just responded in a general sense and then applied it to West Virginia as well.
Q. That specific issue is not addressed in your report, I believe. Do you recall it being

addressed in your report?
A. I don't know, because I do know that the trial is in West Virginia, so I had an idea. So when I was asked specific questions about West Virginia, I tried to respond to those. But that information, I am sure, with a little time, I could find it for you very easily.
Q. Okay.
A. The state health department, in fact, knows that.
And we wouldn't, not only ask about not wanting to quit, but you'd see how many want to quit. And you assume, to a certain degree, the ones who didn't want to quit and responded accordingly.
Q. You have misunderstood my question.
I'm not asking you anything about how people respond to the question, Do you want to quit. I'm asking you whether there are data that demonstrate how many people would say, I don't want a smoking-cessation program, if they were offered one, among West Virginia smokers?
A. I have no idea if that's ever been asked, or if it has the State health department

would have asked that question.
Q. Very good.
And you weren't asked to answer that question for the purposes of this case?
A. No.
Q. Thank you.
Were you asked to determinel, for purposes of this case, the percentage of smokers in West Virginia who were aware of the health risks of smoking at the time they began smoking?
A. I don't think that was one of the questions that I was asked, I don't believe.
Q. And you didn't investigate that?
A. No, I wasn't asked that question.
Q. And you don't know of a study on that issue, specifically, with respect to smokers in West Virginia, do you?
A. No.

Q. Do you know what percentage of smokers in West Virginia smoke simply because they enjoy it?
A. No, I do not.
Q. You weren't asked to assess that question?

262

A. No.
Q. And you, in fact, did not assess that question?
A. No.
Q. Were you asked to determine what percentage of smokers in West Virginia have health insurance that will pay for smoking-cessation?
MR. GOLDBERG: Objection to the question, to the form of the question.
Q. Were you asked to assess that issue or reach a conclusion regarding that issue?
A. No. No, I was not asked.
Q. And you don't know because you haven't looked to see what percentage of smokers in West Virginia have health insurance that would pay for a smoking-cessation program as has been stated stand today; is that correct?
A. No, I was not asked that question. Again, I was given a series of questions, which I responded to. And I was not looking at other things other than the questions that were posed to me, just as if you had posed a few questions, I would try to answer those to you as best I could for you.

263

But some of these, obviously, I have to go to the literature and pull up and sit down and write the report, as you know, because of what you call footnotes, which are various references, I had to use data to try to, you know, to try to respond to that question.
Q. Doctor, would smokers who are currently in a good smoking-cessation program be part of the group that participates in this case?
MR. GOLDBERG: Objection to the form, vague and unclear.
A. I'm really, I'm not sure who is involved in this class-action suit. I know there's some people involved, but I don't know specifics. If I knew that I would be able to tell you or answer that a little more accurately. But I don't know whether it's all teenagers or all adults, it's all men, it's all women. I simply don't know.
I just don't have those specifics. I'm sure they would have been given to me if I had asked. I just chose not to ask.
Q. In formulating and finalizing your opinions in this case, you didn't take into account whether the class would include men; correct? You

264

didn't take that into account because you didn't know. Is that correct?
A. What do you mean take into account? I'm not sure.
Q. Did you take that into account in formulating and finalizing your opinions? Did you

consider --
A. I just looked at smokers in general. Whether they were men or women, I didn't break them out particularly in X amount of men and X amount of women smoked in terms of percentages. I just talked in terms of the overall population, that these are the numbers that we have. So I didn't distinguish between male or female who were smokers.
Q. What percentage of smokers in West Virginia are at risk for smoking-associated disease?
A. I think that is true for not necessarily just West Virginia. I think anyone that smokes is at risk for some type of disease. I think everyone is at risk at some time, I mean for getting or acquiring a disease. So I would say virtually anyone that would smoke, especially if

you smoke over time.
Q. Anyone who smokes, regardless of the extent of his exposure, is at risk for smoking-associated disease?
A. No. I think, realalistically, if someone smoked one cigarette or smoked five cigarettes in their lifetime or whatever, I think you have to give what we see as a regular smoker, anytime that someone starts smoking for a longer period of time that the risk obviously increases.
Q. Is someone who smokes three cigarettes a year at risk for smoking-associated disease? Is that within the scope of your expertise?
A. That's not. But just on my personal opinion.
Q. Well, let's stick with things that are within the scope of your expertise.
Is the issue of whether there is --
I will rephrase.
Is the question of what is the no-effect level of cigarette-smoking, that is to say, the level of exposure below which smoking is not hazardous, within the scope of your expertise?
MR. GOLDBERG: Objection, asked and

answered.
A. I'm trying to think about that.
MR. ROWLEY: Counsel, what was his answer? You say it is asked and answered. What was his answer?
MR. GOLDBERG: He answered that question before.
MR. ROWLEY: Do you remember what he said? I didn't ask the question before.
MR. GOLDBERG: Yes, you did.
THE DEPONENT: What was the question, again?
BY MR. ROWLEY:
Q. Is the question of what is the no-effect level in terms of smoking-associated disease.
MR. GOLDBERG: That was covered extentively. If you want me to go --
Q. Among smokers within the scope of your

expertise.
A. I believe that sort of was asked, not maybe specifically those words. But I can't really tell you specifically what level that might be. So I would probably have to say on that it's probably

outside of my expertise, because I don't go in that. That's not the sort of thing I do.
Q. You don't do that on a day-to-day basis, and that's why it is outside the scope?
A. Yes.
Q. Have the Plaintiffs' lawyers asked you about any kind of specific program that could be set up in West Virginia?
A. No. They asked about my program, I remember, what type of program, and asked about success rates that we had. Other than that, I can't remember anything specifically to that.
Q. Did they ask you to formulate any opinions regarding a potential program that could be or might be set up?
A. No. I was basically responding to the questions that were there. And, obviously, our program is one of the more popular ones that's used in the state. Actually, it's used in many places around the country. So that's what I responded to, because that's what I know.
Q. In formulating and finalizing your opinions, did you take into account any information or assumptions regarding any program that might be

or could be set up?
A. Any?
Q. Did they ask you to make any assumptions regarding a potential program in formulating and finalizing your opinions?
A. No.
Q. They did not?
A. No.
MR. ROWLEY: Let's take a short break.
(Off the record.)
VIDEOGRAPHER: We are now back on the record.
BY MR. ROWLEY:
Q. Doctor Glover, did you bring any materials or files or papers with you to the deposition today?
A. Yes.
Q. What did you bring with you?
A. I think I was told that you --
MR. GOLDBERG: You brought the -- We can go through these. Let me get the list. Do you have the list?
THE DEPONENT: Yes.
MR. ROWLEY: Is counsel saying that

you have a list of things that --
MR. GOLDBERG: No. We are looking at your list.
MR. ROWLEY: Why don't we just mark that. Is that okay?
MR. GOLDBERG: Yeah. Do you have another copy?

MR. ROWLEY: I am sure I do.
Q. Doctor, if you could look, use Exhibit 7 to refer to so we have some idea what you are looking at. Exhibit 7 is the deposition notice.
A. Actually, it's same one that I have here.
Q. I just want to make clear on the record what you are looking at. It is easier to do that if you look at the one with the sticker.
A. I think it is the same one. Yes.
Q. And what part of that are you looking at? Are you looking at the request for the documents?
A. Yes. That's what I had. I had some notations for myself on this.
Q. Let's mark the one with your notation as well.

A. I'm going to share them with you very easily.
Q. I fully expected you to. Could you hand it to me so I can put a sticker on it, please.
THE DEPONENT: There is nothing on there.
(Exhibit No. 8 marked for identification.)
MR. ROWLEY: We have the marked the version of the notice on the document request with your notes as Exhibit 8.
Q. Let me ask you whether you read this list of document requests and attempted to find all documents in your possesion that relate to the request?
A. Yes. The best I could.
Q. We talked about No. 1.
A. Uh-huh.
Q. Did you bring your most recent CV with you?
MR. GOLDBERG: That is this.
A. Yes.
MR. ROWLEY: Let's mark --
MR. GOLDBERG: I assume you will make

copies.
MR. ROWLEY: We will give them to the Court Reporter, and he can attach copies to the exhibit, to the transcript.
MR. ROWLEY: I'm going to mark your CV as Exhibit 9.
(Exhibit No. 9 marked for identification.)
Q. This is dated 7/15/99. Is this the most recent version of your CV?
A. I think I probably made another one like a week ago or something like that; but it is probably not much different, maybe a line or two or something. I keep it pretty much updated all the time.
Q. Do you recall what you have added to Exhibit 9 since you created Exhibit 9?
A. I think we submitted a publication I put in there on an article, a smokeless tobacco article. So I just inserted it in this one. Then

whenever I update I immediately do the day immediately that so I will know that everything has been entered up to that date. That's probably the only thing that is missing.

272

Q. Did the article that you added to Exhibit 9 relate to cigarette-smoking?
A. No. Smokeless tobacco.
Q. Is Exhibit 9 accurate and complete with respect to your educational history?
A. I don't have a copy of that in front of me.
Q. I'm sorry. Here you go.
A. Yeah. I think so.
Q. Is it accurate and complete with respect to your publications?
A. I'm pretty sure. Like I say, there's, I don't know, a couple of hundred or so. There may be a typo or spello or something like that; but to the best of my knowledge, the first several pages, 6, 7, 8, 10, 11, maybe the first 12 pages are basically refereed, and then there's some in progress that we are working on and some that have been submit as well.
And then the last one, two, three, four or so pages refer to nonrefereed, you know, trade journals. I may have written -- and some nonrefereed journals, things of that nature, like Runner's World. Believe it or not, I have written

273

a lot in Runner's World.
Q. I'm just asking you whether there are any that you omitted?
A. No, not deliberately or anything, anyway.
Q. That you are aware of?
A. No.
Q. Is it accurate and complete with respect to your employment history?
A. Yes.
Q. That covers number two on the request for documents that's a part of Exhibit 7.
Did you bring with you all documents that you relied upon or reviewed in forming your opinions in this case?
A. No. Obviously, a lot of it is on my education and judgment and training, and just experience over time.
And in the back of that article lists the actually, where I got those references and so forth. And it all a part of my library. So that is just a lot of information, that and some of the University library. It's just a lot of information to bring all of that. I mean, you guys are surely

274

welcome to, you know.
Q. You're suggesting that I look at your list of references and citations to find out what you relied upon?
A. Yeah. Probably. It would be a lot easier, because there's a lot of information that was, you know, it's in part of my library and the University library as well that we tap into a

little bit.
Q. Did you bring any depositions, medical records, bills, receipts, hospitalization records, test results, lab results, population data or other documents with you?
A. No. None. I don't have any of that.
Q. Have you given the Plaintiffs' lawyers invoices for your time?
A. Yes.
Q. Did you bring those?
MR. ROWLEY: Mark this as Exhibit 10.
(Exhibit No. 10 marked for identification.)
Q. This reflects that you have been paid $6700. Is that -- $6750; is that right?
THE DEPONENT: This is the wrong

thing. Is that the IBEW?
MR. GOLDBERG: I think that's what they asked for.
A. I think you referred to this one, didn't you?
Q. You submitted the IBE --
MR. GOLDBERG: The IBE 2599.
Q. Do you have any invoices aside from those, aside from Exhibit 10?
A. Yes.
Q. Did you bring that with you?
A. No. I can't remember.
MR. GOLDBERG: We can get it.
A. That would be real easy to do.
Q. Give me an idea of how much you --
A. I can tell you exactly. It is I think $14,025. I think that's exactly what it is.
Q. Is that for --
THE DEPONENT: Is that correct, by the way?
MR. GOLDBERG: It is in the 14 area.
A. I think it's 14,025.
Q. Very good. I appreciate it.
A. Do you want this back? Do you want to

just put it in this file?
Q. Anything that's marked the Court Reporter will take.
MR. GOLDBERG: Do you want a copy of that?
MR. ROWLEY: It would be attached to the transcript, since it's been marked.
BY MR. ROWLEY:
Q. The fees that you have been paid, do they go to you personally?
A. Yes.
Q. They don't go to the Center?
A. No.
Q. You're speaking fees from the pharmaceutical companies? Do they go to you personally?
A. I would say probably upward to 90 percent. Occasionally we will put one in the foundation or whatever so we can use it for other types of things, but the majority go to me specifically, I would say upwards of 90 percent.

Q. They go into your personal bank account?
A. Correct. I'm serving as consultant to

277

assist them, so they paid me directly.
Q. Have you worked on any reports for this case other than the reports that have been marked as Exhibits 1 and 2?
A. No.
Q. Have you drafted affidavits, a sworn statement?
A. No.
Q. For either this case or the IBEW?
A. No. Is that what an affidavit is, sworn statement?
Q. It's a sworn written statement?
A. No, I haven't done anything like that, actually for any of the cases.
Q. Has there been any kind of a draft of an affidavit?
A. No.
Q. So the only things that you have reduced to writing for this case have been marked as Exhibits 1 and 2?
A. Yes.
Q. And those are the only things that you have drafted for this case; correct?
A. Yes.

278

Q. Or at least just two, one wasn't drafted for this case.
MR. GOLDBERG: Off the record.
(Off the record.)
VIDEOGRAPHER: We are now back on the record.
BY MR. ROWLEY:
Q. Did you bring anything else did you with you today, Doctor?
A. No.
Q. Is there anything else in your briefcase, for example?
A. There are pens and a parking ticket. Yeah, I think I was asked about.
MR. GOLDBERG: You asked for that.
MR. ROWLEY: I don't know what it is.
A. At least I was told you asked for that. It's what Linda Peterson from CDC, what she, what CDC uses for what a smoker is.
Q. Is this the personal correspondence that you referenced?
A. Yes. It was not -- If you look real closely in the referencing, it's through the SRNT list service, Society for Research and Nicotine

279

Tobacco. They basically have a group, and it just so happens, I mean, I get all of those responses in discussion, and someone, just as I was working on this report, asked, "What constitutes a smoker?" And you can see down there at the bottom. And so she responded. So that was what constitutes a smoker.
Q. When you asked her "What constitutes a smoker," did you specify for what purpose the

question was being asked?
A. I did not ask her. If you look real closely on that e-mail, what happened is someone else below down there inquired, at the bottom of that e-mail, they inquired about "What constitutes a smoker?" So there was a variety of people discussing and kicking it around, and basically when she came up from CDC, they, you know, this is the one that we typically use as a smoker.
Q. How did you get this e-mail?
A. Just printed it off the e-mail,
Q. She sent this e-mail to you?
A. No. She sent it to the list service. We are all -- There is 150 of us, and we all looked at it and I thought, Oh, this is --

Q. I understand.
A. So that became my reference.
Q. Did Doctor Peterson --
Do you know Doctor Peterson?
A. Yeah.
Q. Did she specify the purpose for which that definition was to be used, or do you know?
A. Yeah. Basically, again, if you look real closely, down at the bottom Edward Domino -- and he is actually writing to the list service saying, Definition of a smoker, I have question for everyone, What's the correct definition of a tobacco smoker. An example. Then he gives an example and so forth. Please provide your own definition or modify mine. And then she writes in and says, This is what CDC has used over the years, and that's what the office of smoking and health. And that is typically, you know, the definition that we have always used for smoking.
Q. Did he specify the purpose for which the definition would be used?
A. Who?
Q. The person making the --
A. No. You've got the entire -- you can

see here -- I am sure he was working on a research project and was collecting some demographic data and wanted to be able to be consistent, because we all want to collect the data the same so we can say we compare apples to apples, as opposed to everyone doing it a little differently.
MR. ROWLEY: Let's go off the record.
(Off the record.)
VIDEOGRAPHER: We are now back on the record.
BY MR. ROWLEY:
Q. Doctor, I have marked the e-mail as Exhibit 11; is that right?
A. That's correct.
Q. Neither the request nor the response specifies the purpose for which the definition will be used; is that correct?
A. No. Basically, it was a discussion that was taking place on the internet.
Q. But you presume that the reason the request was made was for use in gathering data in some type of survey; is that correct?

A. Probably. A lot of times when people are going to do some study or whatever, because

282

most of the world's experts are on that list service, and they will just say, Hey, I'm going to do this. Does anyone have any experience? Is there anything you can provide and so forth. So there is a lot of little discussion that goes on on that list service.

Q. Have you exchanged any correspondence or any other documents with the plaintiff's lawyers that you didn't bring with you today?

A. No.

Q. There have been no letters that have gone back and forth?

A. Letters. No, I think like this fax, we talked on the telephone, you know. I don't think I have ever actually physically received a letter.

THE DEPONENT: Can you think of --

A. I mean, I can't think of any -- I typically don't keep those to begin with. I am pretty efficient about throwing out stuff. I just try to deal with the latest information. So I don't think I received anything that I can think of other than telephone calls.

Q. Did they send you anything that you

283

threw out?

A. No. Nothing I can think of. I just don't keep that stuff to begin with. I don't know what that might be. I mean, no information to look at or anything.

Q. Did they send you copies of any of the studies that are cited in your reports?

A. No. No. Those are all basically out of my files.

I know what I -- It just dawned on me what I did receive, was, you know, some information from previous depositions.

Q. Your received transcripts of prior depositions?

A. Yeah.

Q. Did you review those?

A. Yes, I just read them.

Q. Were you told the purpose for which you were sent those?

A. No. Just I asked, you know, what kinds of questions I might be asked, and so they just offered that.

Q. How many transcripts were you sent?

A. Just Henniingfield's, which to me were

284

basically -- I think, Florida. But they were basically -- I think it was Florida cases -- they were bascially not very helpful because he and I work at two different levels. You know, there were some interesting things and so forth, but there was nothing --

Q. He actually has a different area of expertise?

A. Yes. All together. They were interesting, you know, and actually some points

rather boring, but it it's not my area of expertise, and it wouldn't -- because that's not what I want to respond. That's probably on my peripheral area of expertise. I don't know if anyone has ever testified or speaking to what I'm speaking relative to the actual treatment. So those were not very helpful.

Q. What is Jack Henningfield's area of expertise?

A. I think he's a psychopharmacologist. Experimental psychologist, too, slash psychopharmacologist.

Q. What do you mean you two operate at two different levels?

285

A. Well, he's working much more at the cellular level, working at the nicotine addiction, working at the Dopamine, working at the different level, where he might diagnose someone nicotine dependent at a much different level then I would, where I might use general tools and some surveys or some questionnaires and things of that nature. We just work totally different. He's trying to discovery what is happening at that cellular level, uronal level looking at addiction, where I work at a totally different level. Even though he's literally, in my opinion, probably the world's expert in that area.

I'm not necessarily the world's expert in mine, but there are very few peers that have actually worked with as many smokers and treated as many as we have.

Q. So in assessing the same patient you use, the two of you would use different criteria?

A. No. I don't think he assesses patients. I don't think that's what he does.

Q. I thought I heard you say that.

A. No.

Q. Have the Plaintiffs' lawyers asked for

286

you to do any work for the McCune case that you have not yet done?

A. No.

Q. As far as you are concerned, your work is done with respect to the things that they have asked you to do?

A. Yeah, up to date. I think once I complete this interview, the deposition and videotape, that as far as I'm concerned it ends. I am sure it will progress or whatever. But I have not been told of what the next progressive or what the next step, in fact, is.

Q. You have no specific plans for additional work?

A. No.

Q. You have said before that a number of the papers and publications that you list as references are very lengthy publications. That is true, isn't it?

A. Yes. Some of them are, yes.

Q. And they deal with a wide variety of subject matters?

A. Yeah.

Q. Some of them are very general

287

references?
A. Yes, some of them are.
Q. But you cite them for specific propositions in your report; that's fair?
A. I don't know if that is entirely true, because I just look at specifics for what I want. Because say I want a prevalence number, I may have a 600-page document. If I need specifically a number, I have to reference that. So I don't say it's general. I use them in a very specific way. When I try to make claims or statements, I make sure that they are usually referenced. Unless, there is some things you don't reference that are given, you know, that everyone kind of understands. You don't reference every line in a document; otherwise, it becomes too cumbersome. That's just doesn't happen.
Q. But what I'm asking you is that some of those documents deal with a wide variety of subjects?
A. Yes.
Q. And in your report in many cases you are citing it only with respect to a particular subject?

288

A. Yes.
Q. True?
A. Yeah. When you say wide subjects there, I mean, there is a whole variety, but they tend to be specific within themselves, but they are usually held in a much larger document that may contain from A to Z; but usually the publications within say like a certain juncture point are all very specific.
Q. What's the difference between prevalence and incidence?
A. I would again prefer, you know, I'm not a statistician, and I don't specifically want to get into prevalence and incidence and so forth. I think that's beyond my expertise.
Q. Do you know the difference between prevalence and incidence?
A. Again, I think that's beyond my scope of expertise.
Q. Have you published papers that have the word "incidence" in their title?
A. I typically always use the word "prevalence." Prevalence is the people that are, in fact, smoking today as opposed to incidence. I

289

use prevalence. I don't think I have ever used the word "incidence". I use prevalence.
Q. Is the reason for your response that you don't know the difference between prevalence and incidence or that you just prefer not to answer the question?
A. I just think it is beyond my scope of expertise. You know, I don't -- again, to me those are very, very close, and they do have specific definitions. But someone provides a definition I think all you are going to try to do is actually do

double talk and try to cross the two.
It is very simple. I do prevalence and studies. And prevalence is, you know, prevalence of what it is today when we do a survey or whatever. So that is, in fact, what we collect. We collect prevalence as opposed to incidence.
Q. What is the difference exactly between prevalence and incidence?
A. I just told you that I think that is beyond my expertise.
Q. When you read the word "incidence" in a scientific paper or a publication, what do you interpret it to mean?

A. I interpret it to mean pretty much prevalence. I know there are some subtle differences, but they are very similar.
Q. For your purposes and under your understanding, prevalence and incidence are the same thing?
A. No. There is a subtle difference, but I tend to use them interchangeably if I do. But I never use the word "incidence."
If we do a survey in the state of West Virginia, we find out how many, the percentage of smokers. Typically, that would be referred to as prevalence. And that's the way that I would do a survey or look at, and I use the word "prevalence" all the time. I don't really have reason to use the word "incidence" for whatever I -- It's not what I write.
Q. Do you know the subtle difference, as you have characterized it, between prevalence and incidence?
A. Again, I think that is beyond my scope.
Q. How do you know that there is a difference?

A. There is -- I mean, there is a difference.
Q. How do you know that?
A. I took the original stat course.
Q. How do you know that the difference is subtle if you can't explain what the difference is?
A. I mean, because they are very, very similar. And, again, I just don't use incidence. The incidence usually, typically refer to a point in time, where prevalence, I mean, it is just a little subtle difference.
The bottom line is I would rather not go there, because I'm not a statistician who would in fact do that. I took some basic stat courses, but I don't, you know, I'm not an epidemiologist that can go into a great deal or a statistician that could really refine those points for you really well.
Q. So you're saying that the difference between prevalence and incidence is beyond the scope of your expertise?
A. Yes.
Q. What is the scientific definition of prevalence?

A. You didn't get the, just a moment ago the previous question, I told you it's beyond my scope of expertise, and you mentioned prevalence and incidence, and now you are coming back and asking me the definition that it's beyond my scope of expertise. If it was in a previous question it still is now.

Q. Forgive me. I see those as two different questions. So if you would humor me and answer the second question -- Let me rephrase it.

The definition of prevalence or the meaning of prevalence is something that is beyond the scope of your expertise; correct?

A. Yes.

Q. The question of whether a prevalence figure or an incidence figure should be used for a particular scientific purpose is beyond the scope of your expertise?

A. Yes. I typically collect prevalence.

MR. ROWLEY: Move to strike the tail end of that response as nonresponsive.

BY MR. ROWLEY:

Q. The circumstances under which it is appropriate to use prevalence as compared with the

circumstances under which it is appropriate to use incidence is beyond the scope of your expertise?

A. Again, when I collect, I typically collect prevalence, I don't get into incidence. You know, I guess to move your conversation along, you know, because I will keep answering the same way, I would say that it is, yes, beyond my expertise.

Q. The scientific methodologies by which prevalence is measured are beyond the scope of your expertise?

A. My what measured?

Q. The scientific methodologies by which prevalence is measured are beyond the scope of your expertise; true?

MR. GOLDBERG: Object to the form of the question. Measured by whom? I mean, the witness has already answered something about --

MR. ROWLEY: No. No. Don't coach him.

MR. GOLDBERG: I'm not coaching. But your question, the form of the question is objected to.

MR. ROWLEY: There is an objection.

MR.GOLDBERG: I don't want to object, that you stand the risk of evidence stricken.

Q. Go ahead, Doctor, if you remember the question.

A. Would you read the question?

MR. ROWLEY: Could you read it back, please.

REPORTER: "The scientific methodologies by which prevalence is measured are beyond the scope of your expertise; true?"

A. The prevalence is relatively simple. You do a survey and that, you know, you go out and

conduct a survey and so forth, that is typically what we refer to as prevalence. So it is not particularly very, very rigorous, and that's what I typically wind up always using as prevalence, as opposed to incidence. I don't, you know, that's not typically what I use.

Q. There are people who are actually experts in survey methodology?

A. Yes, there are.

Q. Those peoples have statistics backgrounds.

A. Yes.

295

Q. Because the propriety of a particular method of survey is a statistical question; correct?

A. Correct.

Q. Survey methodology is not within the scope of your expertise?

A. That is probably fair. Not my primary expertise, correct.

Q. You keep saying "primary expertise." Survey methodology is not your field; correct?

A. Correct.

Q. It's a field unto itself?

A. Correct. It is, correct.

Q. You don't focus on survey methodology; correct?

A. No. Not particularly.

Q. And you don't purport to have the expertise to assess a survey gathered for epidemiologic or other scientificer purposes for its scientific validity; correct?

A. Would you repeat that? That was a long pause.

REPORTER: "And you don't purport to have the expertise to assess a survey gathered for

296

epidemiologic or other scientificer purposes for its scientific validity; correct?"

A. I think that's probably true.

Q. The surveys that you cite in your reports, you have not assessed the scientific validity of those surveys, have you?

MR. GOLDBERG: Objection, asked and answered.

A. The surveys, you mean like in that second report, any particular, any of the reports?

Q. Any of surveys that you cite.

A. No, I have not gone in and, you know, vigorously looked at and applied any kind of methodology to see if they were very, I mean, were valid, as you might say.

Q. Did you look at the --

Were there confidence intervals that were associated with any of those survey results?

A. I am sure there were. They typically are.

Q. Did you examine the confidence intervals?

A. In some cases. Typically, the -- In other words, when you look at the information, I

297

don't necessarily need to go out and do it myself so that it can, in fact, be valid.

I'm assuming when some of those get published, and there are certain journals that are respected, and refereed journals specifically. If something is refereed, that means at least three outside experts and typically blind individuals have looked at that very critically and very precisely, as you might say, to, in fact, see if it is valid or if the methodology was, in fact, correct.

And it is usually that, you know, in other words, if it is then it is usually accepted. It is based on those three blind reviews or recommendations.

So I don't have the time or the inclination to go on and look at every one of those surveys.

I assume that once it appears in New England Journal of Medicine or in JAMA or some of the well-known or respected journals, I assume that that is correct, because I don't go in and do that. I don't have that kind of time.

Q. According to your CV, you graduated

from Texas Tech in 1969 with a bachelor of arts.

A. Yes.

Q. What was your degree in?

Your CV is Exhibit 9, is that right?

A. Yes, correct.

Q. What was your bachelor of arts degree in?

A. That happened to be in health education.

Q. So what exactly is health education?

A. It is, basically, taking health concepts and ideas and so forth and trying to educate people about them. In other words, it is a very broad term, like nurses, in fact, may do health education, as physicians would. They educate the patient about a health problem, whether it be diabetes or addiction or whatever.

Q. What was your master's in?

A. That was also in health education.

Q. Where did you get your master's?

A. Texas A&I University.

Q. That was in '72.

A. Yes. Correct.

Q. You got your Ph.D. from Texas Women's

University?

A. Woman's.

Q. Woman's University?

A. Correct.

Q. And what year was that in?

A. In '77.

Q. What kind of Ph.D. program was it?

A. That was -- My degree or what kind of program was it?

Q. What was your degree?

A. That was in health science.

Q. What exactly is that?

A. And it's pretty, it is just -- it is

one of those terms that is used interchangeably. It was a little less education in it and a little more about science and trying to participate, because you are going to a university level, so you should have a little bit better grasp of certain concepts of research.

Q. What was the subject of your dissertation?

A. Tobacco.

Q. What about tobacco?

A. The influence, and let me see, the

influence of subliminal perception on tobacco.

Q. That was your Ph.D. --

A. Dissertation, the influence of subliminal perception on tobacco.

Q. That's the study in which you inserted sublimbinal messages in films and purported to measure the effects of those sublimbinal messages upon a patient?

A. Correct.

Q. And the subliminal messages consisted of words like "die" and "smoking"?

A. Correct.

Q. Things of that nature.

And you found in that study something that was surprising to you, and that was that certain of the people who were exposed to the subliminal messages increased their smoking?

A. Yes.

Q. And one of your explanations for that was that it was possible that these highly-emotional words, emotionally- charged words could have provided some positive reinforcement for the person exposed causing him to smoke more?

A. You are generalizing a little bit, but

that is probably, you know, close. I could tell you all about it if you prefer, as opposed to --

Q. Well, I don't want to waste a lot of time on it.

A. Okay.

Q. But if how I characterized it is inaccurate, I do want you to tell me. If you could stick to that specific question.

A. Okay. There were a lot of reasons, one of many, the way people perceived the words. If I use a four-letter word or something you might perceive it a little differently than the individual next to you.

So the words, I found, had no meaning; it was people that had meaning. So that was one.

Plus, maybe using these four-letter words, or whatever, and trying to imply a negative feel in these individuals that they would perceive it as negative, that may not be the case for some people. They may actually see it as reinforcing.

So there was, I didn't come up with a really clear explanation. We were trying to figure out how it worked and so forth, and it was theoretical. And that was done in, I think started

in '75, '76 and completed in '77.

Q. Are you qualified to sit for any medical boards?
A. No. I'm not qualified to sit for medical boards.
Q. Did the Plaintiffs' lawyers ask you to do any kind of cost-benefit analysis in this case?
A. No.
Q. Are you aware of anyone who has done a cost-benefit analysis for purposes of this case?
A. For this case?
Q. Yes, sir.
A. No.
Q. You don't have a degree in consumer behavior?
A. No.
Q. You are not an expert in consumer behavior?
A. No, I'm not.
Q. You're not an expert in microbiology?
A. No, I'm not.
Q. Or toxicology?
A. No.
Q. Or cytology?

A. No.
Q. On cardiology?
A. No. Again, we have gone through all of these once before.
Q. Actually --
A. And if you look very closely, they are all, you're talking about medical areas and specialties. And since I have told you repeatedly, and just a moment ago, again, that I'm not a physician, and you ask those questions again, and you are really going over, being repetitive in specialty areas, I would answer negative to those.
I'm a tobacco researcher that basically works in treating individuals that are addicted to nicotine. It is really, really very simple.
Q. Do you consider yourself or hold yourself out to your peers as a neuro scientist?
A. No, I do not.
Q. Do you have any expertise in medical screening?
A. Medical screening?
MR. GOLDBERG: Objection, vague.
Q. Screening for disease?

A. Could you be more specific?
Q. Screening for diseases?
A. For diseases, no.
Q. In the first paragraph of your September 3 report --
Do you have that in front of you?
A. Let me be sure. Yes.
Q. You say that your opinions are based on a reasonable scientific certainty.
A. Yes.
Q. What does that mean?
A. Basically, what I have done, again, based on my training, my education and my experience and, you know, my judgment in spending

25 years in tobacco and getting a general idea of tobacco research, that is, you know, and reading the literature, what I perceived to be scientific in nature, however limited that, in fact, might be, what I have done is these are my opinions based on the questions that were posed to me.

Q. Does reasonable scientific certainty mean based upon application of the scientific method?

A. Yes. I think so.

Q. What is the scientific method? What does that phrase mean?

A. I think, basically, it is just testing, scientific method as you come up with a theory or ideas and you test it to see if it is valid or nonvalid. And you are just testing theories is what it amounts to. And you come up with a yea or a nay.

Q. All right, Doctor, the first question that you are asked in this September 3 report is something that we touched on briefly, and that is the definition of smoker; is that correct?

A. Yes. Correct.

Q. Do you have your September 3 report in front of you?

A. Yes.

Q. Were you told when you were asked that question for what purpose the definition would be used?

A. No. I wasn't given a purpose. Basically, you are looking at the question the way that I was asked, what is considered a smoker.

Q. You did not, in answering the question, consider how the definition would be used

in this case; is that correct?

A. That's correct.

Q. And the definition that you used, of course, is the definition that is in the e-mail that we have marked as Exhibit 11?

A. That's correct.

Q. And it is your understanding that that is a definition that is used and has been used in certain surveys that are used to gather data for epidemiologic studies?

A. Correct.

Q. You understand that that is not the only definition that is used?

A. Correct.

Typically, what people try to do is be consistent with definitions, so they can compare apples to apples. And even though there is some people collecting it differently, and I think that is what the discussion on the internet was, to see, Hey, what is a smoker, I want to collect some data, I want to be able to compare it to large databases out there.

Q. The definitions of variables in scientific studies, obviously, depend on what the

outcome variable in the study is going to be?

A. Excuse me.

Q. The definitions of covariates in scientific studies depend upon what the outcome variable of the study is going to be; correct?
A. Yeah, I would -- Again, that is beyond my scope of expertise. I think the -- You know, the research and statistics and so forth, I would prefer not to go there.
Q. So the question of assessing the proper definitions of covariates in an epidemiologic or any other type of scientific study in the context of the outcome variable of the study is beyond the scope of your expertise?
A. Typically, I rely -- primarily, I would say yes to your question and respond to that and say that, again, my opinion, because I know the rigors of something like JAMA and the New England Journal of Medicine or various refereed journals and how they have to go through experts to even get it there, because we submit papers all the time, and, you know, they get rejected and some get accepted. And when we submit papers that go through the rigors, and I make an assumption that

because it is in JAMA or New England Journal of Medicine that it is, with a certain amount of certainty, that is scientifically rigorous because it's been looked at by individuals, even though I don't look at each one individually.
Q. I understand all of that, and I heard you say that before.
But my question is, it is not within the scope of your expertise to assess the definitions of covariates in an empirical study? That's not what you do?
A. No, that is not typically what I do.
When we collect data and do research, we always have a statistician on board, because we are living in a day and age where everyone has to be an expert. So when we write a manuscript we usually have five, six or seven people. And even though we all participate, usually the statistician or the epidemiologist is responsible for a section, physician might be responsible for the medical section, I might be responsible for one section.
So what it amounts to, different people, we try to tap in different expertise so we can put a team together to, in fact, come up with a

paper.
To try to do all the work yourself is virtually impossible, because you're competing against experts that are in all of these areas that you would be covering. It is virtually impossible. You can't be all things to all people. What you try to do is you contribute your small piece.
Q. Deciding how a smoker should be defined purposes of a particular type of study or for other purposes is a piece of the pie that some other kind of expert handles, not you; right?
A. In other words -- Can you repeat that? I'm not quite sure.
MR. GOLDBERG: Objection to the form.
Q. Let me rephrase it if you are not

clear.
I'm just trying to understand why you give the response that you just did.
You're explaining that in the studies that you do you have all different kinds of experts, and if you were to do a study that required a definition of a smoker, you would rely on the expertise of someone else in assessing whether for that particular study, for the

310

objectives of that study, for the outcome variable of interest in that study, the definition of smoker that was proposed is an appropriate one; is that true?
A. No, that's because it is so simple to what constitutes a smoker. You, basically, ask two questions, and based on those two questions, so, I mean, we would call that a smoker.
We wouldn't include someone else, an epidemiologist to come in and tell us something quite that simple. Because what constitutes a smoker is very simple, and you have that in the list. So that would be considered a smoker. You ask a couple of questions, and if they answer yes or they do or they don't or whatever, either you're a nonsmoker or a smoker. It is very simple. There is nothing particularly rigorous about that.
Q. Does the appropriate definition of a smoker depend upon the purpose for which the definition is going to be used?
A. Say that again.
Q. Does the appropriate definition of smoker depend upon the purpose for which the definition is going to be used?

311

A. No. I think different people use different definitions. If you look real closely in Exhibit 11, the individual is actually writing in saying, Hey, this is my definition, what is your definition. In other words, they were coming to some kind of agreement within the list service. And CDC is, you know, I think that's the one that's probably the most respected, as opposed to individuals striking out on their own saying anyone that ever smoked a cigarette is a smoker. And I think that is rather ridiculous. And you need some kind of operational definition. And typically CDC is probably the one that everyone respects and works with. And it is relatively simple; you ask two questions on any survey, and that constitutes a smoker or a nonsmoker.
Q. You say it is ridiculous to include anybody who has ever smoked a cigarette. Why is that ridiculous?
A. I think if you smoke one cigarette or took one puff 5, 10, 15, 20 years ago, I don't think that makes you a smoker.
Q. How about three cigarettes a year, is that ridiculous?

312

A. The definition is right here in terms of --
Q. I'm not asking you about this

definition.
A. I think I'm talking about one. I think as you go up, and I can't tell you, yes, at 4 or 5 or 10 or 20, I can't tell you. I do know that once you get to a hundred cigarettes in your lifetime and that you have smoked that and you respond yes to either that you smoked everyday or some days, then that would make a smoker. At least in terms of operational definition and in terms of calculating numbers, that's what considered a smoker. It is nothing particularly magical about that. It is very simple.
Q. Do you know, sir, whether the CDC intended this definition of smoker to be used for any purpose other than gathering survey data for later use in epidemiologic studies?
A. No. I think CDC openly shares anything that they have, because they are government, and so they have to share everything. So I don't see what the problem would be in terms of sharing. They would like for everyone to use

the same definition.
Q. You have misunderstood my question.
In formulating this definition, did they intend that it would be appropriately used for any purpose other than epidemiologic surveys?
A. I don't know that. I don't know how they came about or how they developed it.
Q. If you were to ask the person or persons at CDC whether this is the appropriate definition for use in this case, you don't know what they would say because you haven't asked them?
A. No.
Q. And in order to assess whether this is the appropriate definition for use in this case, anyone who was asked that question would have to know how it is going to be used in that case to answer that question; right?
MR. GOLDBERG: Objection, that question is very vague.
A. Not necessarily. Basically --
MR. ROWLEY: Let me rephrase it. He has objected, and I have an opportunity to rephrase.
BY MR. ROWLEY:

Q. You do not know how the definition of smoker that appears on page 2 of your September 3 report is intended to be used in this case; that's true?
A. No, not entirely. In other words, if I noted, and I think I have noted in there that the U.S. there is, you know, cigarette-smoking prevalence, adult smoking is 23.6. If I, in fact, used that 23.6, the definition that they used, the natural question is, you are going to ask me, Well, what's a smoker? And a smoker, based on that, or in West Virginia, the percentages that they, in fact, may have, which is higher than the national average, when they give me that number, I think a natural question would be anyone would ask, what constitutes a smoker?

And I think from CDC, they basically, those numbers that you see that are in here, that's the definition that they use for a smoker.

So I wasn't asked to, in fact, present, I mean, to look at that. When I looked at the state and the national average, or prevalence, excuse me, I would look at the smoker, you need to know what a smoker, what I'm talking about, and the

CDC and, you know, the behavioral risk factor, those surveys and so forth, they have done them, they are consistent in their definition. So that's what everyone is using.

When you see the numbers from West Virginia or Pennsylvania, they are basically the same numbers that are being used in those large surveys.

Q. How is the definition of smoker going to be used in this case?

A. I don't have any idea.

Q. Therefore, you can't assess whether this definition is appropriate because you don't know how it is going to be used; right?

A. I don't know how it is going to be used, but I do know that when you say that West Virginia has a certain percentage of people who are, in fact, smokers, 27.4 of the adult population, then you need to know what smokers are. And that's what exactly -- I have given you the definition of what a smoker is.

Q. I think I understand that.

It was your assumption in answering this question that the reason you were defining

smoker was to clarify the smoking prevalence percentages that are in the report; fair?

A. Yeah, probably. And that's an assumption I may have made.

If you look real closely at the question "what is considered a smoker" and then estimate how many, you know, smokers reside in West Virginia. So you need to know what a smoker is. So I need to give you that definition and give you the number.

Q. If the purpose of defining smoker in this case is to assess who should be part of a class, you did not consider that issue in providing the definition of smoker that you provided?

A. No. The definition in those numbers were way before me. I used the definition that is used by the government to explain those percentages in West Virginia.

Q. You did not consider that specific use in providing a definition?

A. No. I didn't know how it was going to be used.

Q. The Plaintiffs' lawyer didn't ask you for a definition that would be appropriate in

defining the class in this case?

A. Again, I don't know what the class is. So, no, they did not ask me that.

Q. And you did not consider what

definition would be appropriate in defining the class in this case, because you weren't asked to consider that; correct?
A. Yes.
Q. Very good.
If you smoked one cigarette tomorrow, Doctor Glover, would you be considered a smoker under the CDC definition?
A. No. I mean, you have to smoke at least a hundred or more.
Q. Do you want to think about that answer?
A. If I smoke one cigarette tomorrow?
Q. Yes, sir.
MR. GOLDBERG: The question is asked and answered.
MR. ROWLEY: Okay. We will let it stand. Just trying to be fair to him.
BY MR. ROWLEY:
Q. Doctor, you know that there are

surveys that are conducted today that use definitions of smoker that differ from the one you put in your report?
A. Yes.
Q. You know that one of the reasons for that is that the appropriate definition of smoker depends on the question that the study seeks to answer; right?
A. Yes. I mean, well, the last part about seeks to answer, I don't know if that is true.
I think different people just have different operational definitions. But I think the majority of the literature that is quoted, in fact, because it is coming from, a lot of it is coming from the federal government, that I think those people in the know tend to want to be consistent with that definition that they might use it.
But there's people that, you know, by a simple questionnaire "Are you smoker?" If they say yes, then they are considered a smoker in some of those surveys.
But, obviously, you need to be able to quantify it in some way by saying do you smoke a

hundred or more cigarettes every day or hundred or more cigarettes in your lifetime, yes, and then by saying yes every day or some days that makes you a smoker.
Q. Doctor, if a study were to be -- I am sorry. Were you done?
A. Yes.
Q. If a study were to be performed that intended to compare disease incidence among people who smoked who had a 20-pack-year history of smoking compared to people who never smoked, one would have a different definition of smoker for that study, wouldn't one?
A. Not necessarily. People use the word "pack-year" all the time. I don't, you know, I don't particularly like that. I think physicians use the word pack-year just to get an idea. I

think that was, in my opinion, it is an old way to refer to smoking.
I don't ever use the word pack-years anymore. I mean, that to me doesn't particularly mean anything. It gives me an idea. It's just one more tool, but pack-years is kind of obsolete.
Q. Is a person who smokes 101 cigarettes

320

in his life a heavy smoker?
A. No, I wouldn't constitute them as a heavy smoker.
Q. If a study sought to compare disease incidence among heavy smokers versus nonsmokers, would this be an appropriate definition, the definittion --
A. That's not the kind of research that I do. I don't get into incidence among diseases and so forth. I don't collect that or do that. So I wouldn't know.
Q. So it is beyond the scope of your expertise to say or to express an opinion as to what is the appropriate definition of a smoker in various types of studies or for various types of purposes?
A. Yes. I typically use the one that's in surveys that is used by the government and used -- and it's the one that the majority of people use, even though a lot of people don't use that. They go with surveys, and people that, you know, answer yes or no or accordingly or various things.
People have different definitions. Some people it may constitute a smoker that smoked

321

50 cigarettes, or 20 or whatever. But you need an operational definition for a smoker, and the literature shows that in terms of the prevalence or the percentages throughout the country that they, in fact, use these numbers. And the numbers, that's what they used as a smoker.
Q. Have you performed a comprehensive or other review of the literature to assess how many different types or how many different definitions of smoker have been used say in the last year in epidemiologic surveys?
A. No. I have no reason to do that.
Q. You haven't assessed the percentage of time, the percentage of the time this particular definition that you have put in your report is used compared to other definitions?
A. No, I have not.
Q. Therefore, you do not know, from a review of the literature or from any other source, what the most frequently used definition is; correct?
MR. GOLDBERG: Objection, asked and answered already.
Q. Is that true?

322

A. I think if you -- Again, people look for consistency. And what you are trying to do, when you see something coming from the federal government, they have at least tried to make it very consistent so you can compare apples to

apples.
I think it is individuals out there that sometimes have a different operational definition of what a smoker is.
But within the federal government, I think they are pretty consistent what they collect, whether it's ... might be collecting it or the Office of Smoking and Health, or any of those areas. And I think they try to collect consistent data.
Q. Is exposure to 100 cigarettes in one's lifetime say over a 30-year period a biologically significant exposure?
A. I mentioned or responded to that earlier. I wouldn't know about in terms of biological. That's not in my expertise.
Q. You don't know whether there are any health risks associated specifically with smoking a 101 or 120 or 150 or 200 cigarettes over one's

lifetime; that's true?
A. Yes. I don't know where the cut-off point is, whatever. The 100 cigarettes, and then the question is basically to define what a smoker is. You know, the definition could have been lower, it could have been higher, whatever. You need to numerically be able to have a number or a cut-off point, something that is quantitative that you can quantify in some way to say yes smoker, no smoker.
Q. Tell us how this definition that you have put in your report came about.
A. I don't have any idea other than I know that it's been discussed and seen and so forth. We have always kind of used it because that's what was done.
So it was really pure happenstance that I happened to see it on the internet; in other words, they were actually discussing it. So I just printed that down, because I didn't have a reference, really, other than to go into some of those reports from CDC and so forth.
Q. You don't know how it came about?
A. No, I do not.

Q. Do you know what the alternatives were?
A. No, I do not.
Q. Do you know why this definition was selected for the limited purpose, obviously, for which it was selected over other definitions?
A. No, I do not.
Q. Do you know what the rationale for selecting this definition was?
A. No, I do not.
Q. Do you know what the advantages or disadvantages of this definition versus other definitions?
A. No. I was not looking at CDC or office of wherever it was developed so I have no idea of what the history or the background of that was. I do know that that's typically the operational definition that is used by most people.

And, again, others have used other definitions. But if we want to talk about smokers, that's the one that we use.

Especially if you are going to be referring to government documents, and that's the ones that they use.

325

You can't be changing definitions every two or three years because your, I mean, percentage of smokers within the states would differ too dramatically. You have got to be somewhat consistent and keep that.

And I am sure that will remain the smoking definition for a long period of time, what constitutes a smoker.

Q. In your view, Doctor, if you see a patient -- Let me rephrase that.

If there is a person who smokes one cigarette every four months, do you believe that it is possible for that person to be dependent?

A. I think that is really a hypothetical situation. I don't think you could do that.

As I told you before, I even wrote these so I wouldn't forget. But when someone comes in, we want to assess whether they are nicotine dependent. We don't, you know, we don't do hypotheticals. We don't go through all of that. We don't -- We actually start visiting or interacting with the person. We ask a whole series and do a battery of tests to, in fact, determine if that person is addicted or not.

326

As I said, we use the FTND. We use the FTQ. We use the number of cigarettes, when that first cigarette is smoked in the morning. We even look at CO levels. And we look at cotinine levels and nicotine levels. And not one of those will tell us whether they are highly dependent. It is sort of a little ratio by looking at that. And again it is based on our experience, and knowledge and our judgment whether that individual is.

And just because you may not know how the physiological symptoms of withdrawal occur, when you see it you know what it is.

Q. Yeah. But let's --

May I see the list that you made?

A. Sure.

MR. ROWLEY: Does anybody know the last exhibit number?

MS. SMITH: Maybe it was 9, but I don't know if that was the last.

MR. ROWLEY: I think maybe 11 was the last. Let's mark that as 12.

(Exhibit No. 12 marked for identification.)

BY MR. ROWLEY:

327

Q. The list that you have made I have marked as 12. Is that correct?

A. Yes.

Q. FTND, is that something that you perform to assess whether a smoker is dependent?

A. Yeah. I have told you that several

times in the course of this. And, yes, Fagerstron Tolerance for nicotine dependence.
Q. And what does that involve?
A. It's a series of questions that we ask about their dependence, when they smoke or whatever. Could provide that very easily to you.
Q. How many questions are in the FTND?
A. 11.
MR. GOLDBERG: Off the record.
MR. ROWLEY: This will be the last line. I just want to cover this.
MR. GOLDBERG: Okay. Stay on the record.
BY MR. ROWLEY:
Q. Doctor, I presume the reason that you ask these questions to individual patients is that individual patients respond differently to each question.

A. Yes.
Q. And the reason you asked the questions to individual patients is you want to know what that individual's response is going to be to those questions; correct?
A. Correct.
Q. If there weren't substantial individual variability in the responses to those questions you wouldn't bother to ask them?
A. No. That's not true.
Q. No? Give me an example of one of the questions.
A. How often do you -- Let me ask you, the one that is most predictive is, How soon upon waking up do you light up in the morning? And it's got under 30 minutes, or it's got certain time frames.
Q. And the answer that's given to that question depends on who you ask?
A. Well, sure. There is certain levels of addiction.
Q. And the answer to that question provides you some information --
A. Yeah.

None of these are definitive, and that's why we use a whole battery of things. Because you don't ask -- You're zeroing in on one questionnaire and one question, and that doesn't determine it. That's really foolish if you go about doing that.
What we do is try to bring our experience and what we have done and a whole series and battery of tests and questions, and we make a judgment.
And, again, if you look there, you know, it is based, the judgment is based on the training that we have and how people have learned to administer those tests and understanding of those tests. And then what you actually wind up doing is we make a determination at the end by looking at a whole battery of things, not just one?
Q. Suffice it to say that the FTND is used as a part of assessing the issue of nicotine

dependence?
A. Yes.
Q. And that the answers to the questions in the FTND vary from individual to individual?
A. They can't vary too much; there is

330

only four questions.
Q. There are 11 questions.
A. There is four stems within that question.
Q. Which of the four each person selects varies from person to person?
A. Can't vary to more than four.
Q. Goodness gracious.
A. Well, it can't. I mean, it is not ad infinitum variability; there is four.
Q. I didn't mean to imply that.
A. I mean, you know, if you would have said four I would said yes.
Q. Doctor, to know what a person's response is going to be, which of the four he is going to select, you give him the test; right?
A. What was the question again?
Q. Look. For a given question, which of the four possible responses are given depends on the individual that is taking the test?
A. Yes.
Q. Thank you.
What is the FTQ?
A. Fagerstrom Tolerance Questionnaire.

331

Q. And by the way, all of the 11 questions in the FTND are used to assess nicotine dependence; is that fair?
A. Yes.
Q. And what --
A. You come up with a composite score. So it is not one particular question. Even though one is a little more predictive than the others, you come up with a composite score.
Q. Is there a way that you can bring a copy of the FTND questionnaire with you tomorrow, have it faxed?
A. Yeah, I mean, I could call the office and have it faxed, I'm sure.
Q. I would very much appreciate if you could do that.
A. You have got most of my notes on there. Do you want to photocopy that now or something?
Q. No. We can photocopy it when we are done. I want to try to get through this quickly and get you out of here today.
A. Okay.
Q. Then we will resume tomorrow.

332

A. Okay.
Q. You will do that for us this evening?
A. Yes.
Q. Tell us about the FTQ.
A. It is basically the original version of the FTND. Again, you know, similar questions. And, basically, all, what happened is some things

changed a little over time. And the one that was most widely used is probably the FTQ; and the new one now, which is the revised version, is basically called the FTND. So they are pretty much the same thing; one is just a revised version of the other.

Q. The FTQ, obviously, is a series of questions as well?

A. Yes. It's identical to the other one.

Q. And how the questions are answered, obviously, depends --

A. Well, not identical. Just the thing evolved a little bit. One is kind of a revision, some subtle changes.

Q. The answer, which answer to the question is given, obviously, depends on which patient is asked; is that correct?

A. Yes.

Q. That's true with respect to the FTQ?

A. Yes.

Q. And the FTQ is used in assessing dependence; correct?

A. No. It is just one of many things. You keep -- It is one of many things -- Let me finish. I mean, it is just one of many things.

In other words, you keep trying to say that that's the only tool. It's not. It's just one of many of the tools that we use this. And that's just one that we in fact use; it's not the entire tool.

Q. I do not mean to imply that that's the only thing you use.

The FTQ is part of the process of assessing nicotine dependence?

A. Yes.

Q. Then the next thing that you wrote is number of cigarettes. Is that another question that you asked?

A. That is on the FT, you know, as well, the FTND and FTQ, and it's a question that we always ask when we are looking at it, the number of cigarettes that people smoke.

In other words, it's a general feeling that if someone is, if you're smoking three packs a day and I'm smoking one, typically, you know, most people will look at the number of cigarettes that you smoke and make a determination and say, Hey, if you are smoking 360 and I am smoking 20 you are more addicted than I. And that logically makes sense, and a lot of people, in fact, use that to determine dependence. But it's for us it's just one of many, because we have learned a lot subsequently about compensatory smoking and how people smoke them. And we found that some people can smoke fewer cigarettes and get as much or more nicotine or tar than someone that is smoking more cigarettes, because they may let it set for a long --

So there is a whole variety, topography in terms of smoking that you can go into.

Q. The number of cigarettes smoked is

part of the basis for assessing dependence?
A. Yes. It's not the full part.
Q. Obviously, that varies from individual to individual?

335

A. Yes.
Q. Is the duration of smoking, how long the person has smoked, part of assessing dependence?
A. Yes. I think that that's -- I don't know if I have that on there, but that's a definite point in terms of duration. I don't remember the list. I just wanted to make sure that I didn't forget any of these, because there is no set pattern. Can I take a look at it?
Q. Sure.
A. I can tell you if it is on there.
No, the duration isn't on there. But I think that that's a -- you brought up a good point.
And typically what we find is, you know, that the more a person smokes over time that it becomes a little more difficult for them to quit.
Q. We will get out of here a lot quicker if you could restrict your answer to the questions that I ask.
And I don't mean to imply that Exhibit 12 is a complete list, and it's on the record that

336

it is not a complete list. So you don't have to worry about that.
So the duration smoked is part of assessing whether somebody is dependent?
A. Yeah. Obviously, yes, if someone has been smoking a shorter time. If somebody has been smoking a long time, we know that it is, in fact, inculcated.
You ask questions, and I can't limit the answers just to try hurry to get you out of here. You know, I would like to be able to respond to the question.
Q. Go ahead. Are you done?
A. Yes. You know, it's kind of difficult speaking when you keep interrupting. You interrupted twice during that.
Q. Are you done?
A. Yes.
Q. The duration of the smoking habit, obviously, varies from smoker to smoker?
A. Uh-huh.
Q. You have to answer verbally.
A. Yes.
Q. Does whether the person inhaled or

337

inhales when they smoke, is that relevant to the question of whether they are dependent?
A. I think that is one of questions on the Fagestrom, whether they inhale deeply or how deeply they inhale.
That's, again, part of the overall. But, you know, if you go a little bit further on that list, you know, it's looking at nicotine and

cotinine --
Q. Sure.
A. -- and that usually tells you whether they have inhaled or how much they have taken in.
Q. Whether inhale and how they inhale is part of the assessment of dependence?
A. Yes, it could be.
Q. Well, that's why you ask, because it is relevant to the question?
A. Yes.
Q. And it is part of this standard battery of questions that you ask?
A. Yes. I ask a lot of questions.
Q. And that differs from individual to individual?
A. Uh-huh.

Q. Correct?
A. Correct.
Q. You have first cigarette in the morning written down. You ask about that?
A. That's also on the Fagerstrom Tolerance Questionnaire. That's the most predictive question. All those questions, they are all important, but how quickly someone lights up in the morning is pretty well known about most researchers will kind of give you a pretty good idea.
If I am talking to physicians and training them, you basically say, Hey, if you really, you do a whole battery of tests, and a lot of things that you can do, and this is typically what we do, but if you want the quickest down-and-dirty way to determine whether they are a highly-dependent smoker is see how quickly they light up in the morning. If they light up within the first 30 minutes then obviously they need the nicotine. And we perceive that in our treatment and what we do as being a highly dependent smoker.
Q. I'll take that as a yes. Does that factor vary from smoker to smoker?

A. The --
Q. When they have their first cigarette in the morning, does it vary?
A. Yes. It varies. Yes, it would.
Q. CO^2 levels, without explaining to me why you do it, and all the various implications of it, can you just tell me whether that is part of assessing whether someone is dependent?
A. Yes. Yes, it is.
Q. Those, obviously, vary from smoker to smoker?
A. Yes, they would.
Q. Measuring cotinine levels, without going into any great detail of why you do it or the various implications of doing it, measuring cotinine levels is part of the process, not the whole process but a part of the process of assessing dependence?
A. Yes. That is correct.
Q. And those vary from smoker to smoker?
A. Yes, they would.

Q. And in the briefest thumbnail way possible can you explain to me why you put nicotine on this list?

340

If I read your writing correct.
A. We look -- obviously, if we look at nicotine levels and there is nicotine in the body, there is assuming that, you know, there is only a couple of ways to ingest it, and we are assuming if that person is smoking. We look at the nicotine levels. We look at cotinine levels. And we look at all of those to again determine -- If someone is claiming that they are smoking and, in fact, reality they are not smoking, we could determine by looking at nicotine/cotinine levels. If it is not there than they are not really either inhaling or not smoking or maybe they just think they or whatever.
So that gives us an idea or reassures in fact that they are, in fact, smokers.
Q. That varies from person to person?
A. Yes. That can, yes.
Q. Do you ask about prior quit attempts?
A. Yes. We do.
Q. What is it about prior quit attempts that provides you with information to assess dependency?
A. That's actually a very good question,

341

because we actually ask them about prior quit attempts, and we ask them what they experienced.
And what we will typically will find is they will talk about, you know, they had anxiety or haddifficulty concentrating or whatever. And that's some of the typical symptoms of withdrawal. And so that again is another part of the overall thing we do.
So when they make previous attempts and they have difficulty staying off cigarettes, we say, Why was that, what did you do?
And so we ask through a lot of probing and find out. And we can usually determine, again, there on the previous quit attempts that they, in fact, were experiencing withdrawal.
Q. Is the number of quit attempts -- without an elaborate explanation -- can you simply tell me whether the number of quit attempts was used to assess the issue of dependence, nicotine dependence?
A. Not necessarily. We don't use the number of prior quit attempts for assessing nicotine dependence, that I can think of.
Q. Is the number of prior quit attempts

342

relevant to the issue of nicotine dependence?
A. Yes.
Q. Does that vary from person to person smoker to smoker?
A. Yes. I mean, everyone could be different attempts -- you may have three, I may have two, someone else may have four.
Q. Do you attempt to assess the person's, the strength of the person's motivation to quit?

A. We always ask that question, how motivated they are to quit, yes.
Q. Does that vary from smoker to smoker?
A. Yes. Some -- Again, there is a certain variability there. So we don't give them a whole bunch of options. And they will say yes. Or we have like four stems that we ask, yes, very motivated, highly motivated, not as motivated or not motivated. So there is four or five. So that can differ within a four range or something, but it can differ with individuals.
Q. The answer that a person selects depends on what person you ask?
A. Yes. It could.
Q. Well, it does?

A. Uh-huh.
MR. GOLDBERG: You need to wrap up for the day relatively soon. We are about 15 minutes beyond.
MR. ROWLEY: That's fine.
MR. GOLDBERG: -- one or two questions, but if it is more than that, we will be back tomorrow morning.
MR. ROWLEY: I think I am done with this line of questioning.
MR. GOLDBERG: And we are off the record, then?
MR. ROWLEY: one.
MR. GOLDBERG: One more question.
BY MR. ROWLEY:
Q. How long does the process of assessment take, the assessment for dependence?
A. For the assessment of dependence -- let me look at your list again. Let me go over it. Because obviously, a lot of it depends on the individual.
We find some people have -- or you have got to read a lot of the questions to them, because West Virginians, you know, some, a lot of

people cannot read, so we have to walk them through it or read the questions to them. And other people can do it on their own. So I can't give you an exact number. But I would say probably four hours, three, four hours something like that.
Q. How long the assessment takes varies from smoker to smoker depending on factors like the one you just mentioned?
A. Yes.
Q. Then this will be my last question.
I know that you don't use any one thing exclusively in assessing dependence. But are the DSM criteria for nicotine dependence included in what you use to assess nicotine dependence?
A. I think some of the definitions that we use. We don't use that specifically all the time. But some of the criteria, when you look at what constitutes a smoker, you know, they have to meet a certain, excuse me, what constitutes an addictive smoker, then they have to meet those criteria.
Q. You use the DSM criteria in part --

Let me rephrase it.
Part of your process of assessing

whether a person is nicotine dependent is to determine whether that person meets the DMS-IV criteria; correct?
A. Not specifically to -- you know, we don't follow letter the DSM-IV. I think that's more of a different diagnostic tool than we might use all the time.
Again, we use, from our experience, a whole battery of tests or a different kind of tests to determine what an addicted smoker is. I think those are very precise in the way they look at it.
And once you get experience in working with smokers, you begin to have a different feel of someone being addicted or not addicted. So they are part of the overall criteria.
And when you look at the withdrawl symptoms there, we ask, you know, we ask about those withdrawals symptoms as well in these individuals.
In fact, if they are expressing, when I am talking to you about previous quit attempts, you are talking about withdrawal and so forth, then, obviously, that's a little bit of what is in the DSM-IV. But I don't take that DSM-IV in as a

blueprint and say you have to meet this to be this. We have our criteria that, in fact, that we use.
Q. Let me make sure I understand. The DSM-IV criteria are a part of the criteria that you use?
A. Yeah. We use it. It's not -- Again, a small part. It's not the major part or anything. We use the whole battery of things.
MR. ROWLEY: We will resume at 9:00 tomorrow.
(Deposition adjourned for the evening.)

STATE OF WEST VIRGINIA, To-wit:
I, Johnny Jay Jackson, a Notary Public and Registered Diplomate Reporter within and for the State aforesaid, duly commissioned and qualified, do hereby certify that the deposition of ELBERT D. GLOVER, Ph.D. was duly taken by me and before me at the time and place specified in the caption hereof.
I do further certify that said proceedings were correctly taken by me in stenotype notes, that the same were accurately transcribed out in full and true record of the testimony given by said witness.
I further certify that I am neither attorney or counsel for, nor related to or employed by, any of the parties to the action in which these proceedings were had, and further I am not a relative or employee of any attorney or counsel employed by the parties hereto or financially interested in the action.
My commission expires the 30th day of September 2004.
Given under my hand and seal this 4th day of October, 1999.

Johnny Jay Jackson
Registered Diplomate Reporter
Notary Public